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1960 Specification

Tables

AW-60

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U. S. Military Aircraft

Manufacturer	Military designation	Military name	Primary mission	Number in crew	Over-all span	Over-all length	Over-all height, 3-pt.	Gross wing area, sq. ft.	Weight empty, lb.	Normal gross wt., lb.	Maximum gross wt., lb.	Number, make, model and max. rating, ea.
	BASIC AIRCRAFT DATA			DIMENSIONS					WEIGHTS			POWERPLANT
Beech Aircraft Corp. *Wichita, Kansas*	T-34A	Mentor	Trainer	2	32.8′	25.9′	10′	177.6	2,156	2,950	2,950	1 Con. O-470-13 @ 225 h.p.
	T-34B	Mentor	Trainer	2	32.8′	25.9′	10′	177.6	2,254	2,985	2,985	1 Con. O-470-13 @ 225 h.p.
	L-23D	Seminole	Liaison Transport	1–2	45.25′	31.5′	11.6′	277	4,460	7,000	7,000	2 Lyc. GSO-480-B1B6 @ 340 h.p.
	RL-23D	.....	Radar Recon.	2	50.3′	31.11′	11.6′	293.9	5,954	7,350	7,350	2 Lyc. GSO-480-B1B6 @ 340 h.p.
	L-23F	.....	Liaison Transport	1–2	45.8′	33.3′	14.1′	277	4,740	7,700	7,700	2 Lyc. IGSO-480-A1A6 @ 340 h.p.
Boeing Airplane Co. *Seattle, Wash.*	B-47E	Stratojet	Med. Bomber	3	116′	107′	28′	.....	....	.....	200,000	6 GE J47-GE-25 @ 6,000 lb.t.
	B-52A	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	350,000+	.....	8 P&W J57-P-1W @ 10,000+ lb.t.
	B-52B	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	350,000+	.....	8 P&W J57-P-1W @ 10,000+ lb.t.
	B-52C	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	400,000+	.....	8 P&W J57-P-19W @ 10,000+ lb.t.
	B-52D	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	400,000+	.....	8 P&W J57-P-19W @ 10,000+ lb.t.
	B-52E	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	400,000+	.....	8 P&W J57-P-19W @ 10,000+ lb.t.
	B-52F	Stratofortress	Heavy Bomber	6	185′	152′ 9″	48′ 3″	4,000	....	400,000+	.....	8 P&W J57-P-43W @ 10,000+ lb.t.
	B-52G	Stratofortress	Heavy Bomber	6	185′	157′ 9″	40′ 9″	4,000	....	450,000+	.....	8 P&W J57-P-43W @ 10,000+ lb.t.
	.....	Dyna-Soar[2]	Recon.-Bomber	..	.....	.....	.....	.....	....	.....	.....	.....
	B-52H	.....	Heavy Bomber	..	.....	.....	.....	.....	....	.....	.....	8 P&W JT3D @ 13,000+ lb.t.
Cessna Aircraft Co. *Wichita, Kansas*	T-37B	.....	Trainer	2	33′ 10″	29′ 3″	9′ 2″	183.9	4,056	6,569	6,600	2 Con. J-69-25 @ 1,025 lb.t.
	Model 407	.....	.....	..	36′ 3″	31′ 8″	9′ 4″	200.32	4,658	9,300	9,500	2 Con. 356-9A @ 1,400 lb.t.
Chance Vought Aircraft, Inc. *Dallas, Texas*	F8U-1	Crusader I	Day Fighter	1	35′ 8″	54′ 3″	15′ 9″	.....	....	.....	.....	1 P&W J57-P-4A @ 10,000+ lb.t.
	F8U-1P	Crusader I	Photo-Recon.	1	35′ 8″	54′ 6″	15′ 9″	.....	....	.....	.....	1 P&W J57-P-4A @ 10,000+ lb.t.
	F8U-2	Crusader II	Day Fighter	1	35′ 8″	54′ 3″	15′ 9″	.....	....	.....	.....	1 P&W J57-P-16 @ 10,000+ lb.t.
	F8U-2N	Crusader II	AW Fighter	1	35′ 8″	54′ 3″	15′ 9″	.....	....	.....	.....	1 P&W J57-P-20 @ 10,000+ lb.t.
Convair Division General Dynamics Corp. *San Diego, Calif.*	F-102A	Delta Dagger	AW Interceptor	1	38′ 1″	68′ 3″	21′ 2″	.....	....	.....	.....	1 P&W J57-P-23 @ 10,000+ lb.t.
	TF-102A	.....	Trainer	2	38′ 1″	59′ 2″	20′ 7″	.....	....	.....	.....	1 P&W J57-P-23 @ 10,000+ lb.t.
	F-106A	Delta Dart	AW Interceptor	1	38′ 3″	70′ 9″	20′ 3″	.....	....	.....	.....	1 P&W J75 @ 15,000+ lb.t.
	T-29C	Flying Classroom	Crew Trainer	4	91′ 9″	74′ 8″	27′ 3″	817	29,000	43,575	43,575	2 P&W R-2800-99W @ 2,500 h.p.
Ft Worth, Tex. Division	B-58	Hustler	Bomber	3	56′ 10″	96′ 9″	31′ 6″	1,542	....	160,000	.....	4 GE J79 @ 15,000 lb.t.
	WS-125A	.....	Bomber	..	.....	.....	.....	.....	....	.....	.....	Nuclear power (P&W)
Douglas Aircraft Co. *Long Beach, Calif.*	B-66B	Destroyer	Tac. Bomber	3	72′ 6″	75′ 2″	23′ 7″	780	42,086	78,000	83,000	2 All. J71-A-11 @ 10,000 lb.t.
	WB-66D	Destroyer	Weather-Recon.	3	72′ 6″	75′ 2″	23′ 7″	780	43,476	70,000	83,000	2 All. J71-A-13 @ 10,200 lb.t.
	A3D-2	Skywarrior	Attack	3	72′ 6″	76′ 4″	22′ 9″	780	38,298	70,000	.....	2 P&W J57-P-10 @ 10,500 lb.t.
El Segundo, Calif. Div.	A4D-2N	Skyhawk	Attack	1	15′ 0″	40′ 1″	15′ 2″	260	9,559	16,236	.....	1 Wr. J65-W-16A @ 7,700 lb.t.
	F4D-1	Skyray	Interceptor	1	33′ 6″	45′ 6″	13′	557	16,024	27,000	.....	1 P&W J-57-P-8B @ 10,200 lb.t.
Goodyear Aircraft Corp. *Akron, Ohio*	ZS2G	.....	ASW Airship	8	67′ 6″	285′ 3″	92′ 6″	1,959′	30,764	.....	.....	2 Wr. Mod. R-1300-4 800 h.p. @ 2600 rpm
	ZPG-2	.....	ASW Airship	14	75′ 5″	342′ 7″	96′ 8″	2,080′	46,732	.....	.....	2 Wr. Mod. R-1300-2A 800 h.p. @ 2600 rpm
	ZPG-2W	.....	AEW Airship	21	75′ 5″	342′ 7″	106′ 9″	2,080′	47,779	.....	.....	2 Wr. Mod. R-1300-2A 800 h.p. @ 2800 rpm
	ZPG-3W	.....	AEW Airship	21	85′ 2″	403′ 5″	117′ 8″	2,612′	71,793	.....	.....	2 Wr. Mod. R-1820-88 1525h.p. @ 2800rpm
	GA-468	Inflatoplane	Recon., Rescue	1	.....	19′ 8″	.....	110′ 3″	225	.....	550	42 h.p. Nelson
	GA-466	Inflatoplane	Recon., Rescue	2	.....	19′ 3″	.....	154′ 3″	290	.....	740	60 h.p. McCulloch
Grumman Aircraft Eng'rg. Corp. *Bethpage, N. Y.*	F9F-8T	Cougar	Trainer	2	34′ 6″	48′ 6″	12′ 1″	.....	....	20,600	.....	1 P&W J48-P-8A @ 7,200 lb.t.
	F11F-1	Tiger	Interceptor	1	31′ 8″	40′ 10″	12′ 9″	250	13,428	21,174	24,078	1 Wr. J65-W-18 @ 10,500 lb.t.
	F11F-1F	Super Tiger	Interceptor	1	31′ 8″	40′ 10″	12′ 9″	250	....	.....	.....	1 GE YJ79-GE-3 @ 10,000+ lb.t.
	S2F-1	Tracker	ASW	4	69′ 8″	42′ 3″	16′ 3″	.....	....	.....	.....	2 Wr. R1820-82 @ 1,525 h.p.
	WF-2	Tracer	AEW	4	69′ 8″	45′ 4″	16′ 10″	507	....	.....	.....	2 Wr. R1820 @ 1,525 h.p.
	W2F-1	.....	AEW	5	.....	.....	.....	.....	....	.....	.....	2 All. turboprop
	AO-1AF	Mohawk	Observation	2	42′	41′	12′ 8″	330	7,772	.....	12,800	2 Lyc. T53-L-3 @ 1,005 eshp.
	A2F-1	.....	Attack	2	.....	.....	.....	.....	....	.....	.....	2 P&W J52 @ 7,500 lb.t.
	S2F-3	Tracker	ASW	4	72′ 7″	43′ 6″	16′ 7″	.....	....	.....	.....	2 Wr. R1820-82 @ 1,525
Lockheed Aircraft Corp. *Burbank, Calif.*	F-104G	Super Starfighter	Interceptor	1	21′ 11″	54′ 9″	13′ 6″	.....	....	.....	.....	1 GE J79-GE-3A @ 15,000 lb.t.
	F-104F	Super Starfighter	Fighter Bomber	2	21′ 11″	54′ 9″	13′ 6″	.....	....	.....	.....	1 GE J79-GE-3A @ 15,000 lb.t.
	F-104C	Starfighter	Fighter	1	21′ 11″	54′ 9″	13′ 6″	.....	....	.....	.....	1 GE J79-GE-7 @ 15,000 lb.t.
	F-104D	Starfighter	Tac. Trainer	2	21′ 11″	54′ 9″	13′ 6″	.....	....	.....	.....	1 GE J79-GE-7 @ 15,000 lb.t.
	EC-121D	Warning Star	Radar Picket	31	123′ 5″	116′ 2″	27′	1,654	....	.....	.....	4 Wr. R3350 @ 3,250 h.p.
	P2V-7	Neptune	ASW	..	103′	54′ 9″	13′ 6″	1,000	47,450	75,500	.....	2 Wr. R3350-32W @ 3,500 h.p.+
									....	.....	.....	2 We. J34 @ 3,400 lb.t.
	Y/P3V-1	.....	ASW	10	99′	104′ 7″	33′ 1″	1,300	....	125,000*	.....	4 All. T56-A-10W @ 4,500 eshp.
	U-2	.....	Research	1	.....	.....	.....	.....	....	.....	.....	1 P&W J57 @ 10,000 lb.t.
The Martin Co. *Baltimore, Md.*	.....	Dyna-Soar	Recon,-Bomber	..	.....	.....	.....	.....	....	.....	.....	Multi-rockets
	P5M-2	Marlin	ASW	8	118′ 2″	101′	32′ 8″	1,406	49,480	74,442	85,000	2 Wr. R3350-32W @ 3,400 h.p.
McDonnell Aircraft Corp. *St. Louis, Mo.*	F101C	Voodoo	Fighter-Bomber	1	40′	67′ 5″	18′	.....	....	.....	.....	2 P&W J57-P-13 @ 10,000+ lb.t.
	RF-101C	Voodoo	Photo-Recon.	1	40′	69′ 3″	18′	.....	....	.....	.....	2 P&W J57-P-13 @ 10,000 +lb.t.
	F-101B	Voodoo	Interceptor	2	40′	.....	18′	.....	....	.....	.....	2 P&W J57-P-55 @ 10,000+ lb.t.
	F3H-2N	Demon	.....	..	.....	.....	.....	.....	....	.....	.....	.....
	F4H-1	Phantom II	AW Interceptor	2	38′ 5″	56′	.....	.....	....	.....	.....	2 GE J79-GE-2 @ 15,000+ lb.t.
North American Aviation, Inc. *Los Angeles, Calif.*	B-70	Valkyrie	Bomber	4	.....	.....	.....	.....	....	.....	600,000*	6 GE YJ93 @ 25,000+ lb.t.
	F-86F	Sabre	Fighter-Bomber	1	37′ 1″	37′ 5″	14′ 7″	.....	....	.....	17,000	1 GE J47-GE-27 @ 5,970 lb.t.
	F-86H	Sabre	Fighter-Bomber	1	37′ 1″	38′ 8″	15′	.....	....	.....	.....	1 GE J73-GE-3 @ 9,000 lb.t.
	F-86K	Sabre	Interceptor	1	37′ 1″	42′ 4″	15′	.....	....	18,500	20,347	1 GE J47-GE-33 @ 5,600 lb.t.
	F-86L	Sabre	Interceptor	1	37′ 1″	42′ 4″	15′	.....	....	.....	.....	1 GE J47-GE 33 @ 7,650+ lb.t.
	F-100C	Super Sabre	Fighter	1	38′	47′	15′	.....	....	.....	.....	1 P&W J57-P-7 @ 10,000+ lb.t.
	F-100D	Super Sabre	Fighter-Bomber	1	38′	47′	16′	.....	....	.....	.....	1 P&W J57-P-21 @ 10,000 lb.t.
	F-100F	Super Sabre	Fighter-Bomber	2	39′	50′	16′	385.2	21,346	34,235	.....	1 P&W J57 @ 10,000+ lb.t.
	F-107A	.....	Research	1	36′ 7″	60′ 10″	19′ 8″	.....	....	.....	.....	1 P&W J75 @ 15,000+ lb.t.
	X-15	.....	Research	1	22′	50′	13′	200	....	.....	31,275	1 RMI XLR-99 @ 50,000+ lb.t.
Columbus (Ohio) Division	T-39	Saberliner	Utility	2	44′ 5″	43′ 8″	15′ 11″	342.5	9,199	15,330	.....	2 P&W J60 @ 3,000 lb.t.
	FJ-4B	Fury	Fighter-Bomber	1	39′ 1″	36′ 6″	13′ 11″	338	....	19,900	.....	1 Wr. J65-W-16A @ 7,700 lb.t.
	A3J-1	Vigilante	AW Attack	2	53′	73′	20′	.....	.....	.....	.....	2 GE J79-GE-2 @ 15,000 lb.t.
	T2J-1	Buckeye	Trainer	2	36′	38′ 8″	14′ 9″	255	6,893	9,916	11,373	1 We. J34-WE-46 @ 3,400 lb.t.
Northrop Corp. *Hawthorne, Calif.*	T-38A	Talon	Trainer	2	25′ 3″	44′ 3″	12′ 10″	.....	7,200	.....	11,500	2 GE J85-5 @ 3,850 lb.t.
	N-156F	Freedom Fighter	Fighter	1	26′ 5″	44′ 10″	13′ 2″	173.44	7,596	12,190	16,230	2 GE J85-5 @ 3,850 lb.t.
Republic Aviation Corp. *Farmingdale, N. Y.*	F-105D	Thunderchief	AW Fighter Bomb.	1	34′ 11″	64′ 3″	19′ 8″	385	28,000	34,000	46,000	1 P&W J75-JT 4A-29 @ 15,000+ lb.t.
	F-105B	Thunderchief	Fighter Bomber	1	34′ 11″	63′ 11″	19′ 8″	385	....	.....	.....	1 P&W J75-P5 @ 20,000+ lb.t.
Temco Aircraft Corp. *Dallas, Texas*	TT-1	Pinto	Trainer	2	29′ 10″	30′	10′ 10″	150	3,139	4,400	4,400	1 Con. J69-T-2 @ 920 lb.t.

PERFORMANCE						ARMAMENT	CHRONOLOGY				REMARKS
Normal fuel cap., gal.	Maximum speed, mph.	Initial rate of climb, fpm.	Stall speed, dirty, mph.	Service ceiling, ft.	Combat radius, mi.	Number, type and designation	First flight of prototype	First production contract	First deliveries to service	First flight, first production article	
50	189	1,120	56	18,200	.....	2 x 30 cal. mg.; 6 rockets	Dec. '48	Nov. '52	Sept. '53	Oct. '53	
50	188	1,100	58	18,100	.....	2 x 30 cal. mg.; 6 rockets	Dec. '48	June '54	Dec. '54	Nov. '54	
230	230	1,580	84	25,500	.....	None	.....	July '56	Dec. '56	Nov. '56	
168	230	1,463	84	23,800	.....	None	Dec. '58	Feb. '58	Feb. '59	Feb. '59	
230	239	1,300	80	27,000	.....	None	Aug. '58	June '59	Mar. '60	Feb. '60	
...	600+	....	..	40,000+	1,500+	2 x 20 mm. cannon; 20,000 lb. bombs; GAM-63 Rascal.	Dec. '47	Sept. '48	Oct. '51	June '50	Production discontinued Feb. '57.
...	600+	....	...	50,000+	.....	.....	Apr. '52	Feb. '51	June '54	Aug. '54	XB-52 contracted June '46.
...	600+	....	...	50,000+	.....	.....	.....	Dec. '52	Nov. '55	Jan. '55	Also J57-P-29W; J57-P-19W.
...	600+	....	...	50,000+	.....	.....	.....	Dec. '53	Jan. '56	Mar. '56	Also J57-P-29W.
...	600+	....	...	50,000+	.....	.....	.....	Dec. '54	Nov. '56	Sept. '56	Also J57-P-29W.
...	600+	....	...	50,000+	.....	.....	.....	May '53	Oct. '57	Oct. '57	Also J57-P-29W.
...	600+	....	...	50,000+	.....	.....	.....	Aug. '56	June '58	June '58	
...	600+	....	...	50,000+	.....	2 NAA GAM-77 Hound Dog	.....	Sept. '57	Oct. '58	Oct. '58	
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	USAF-NASA joint project.
..	.....	....	...	.....	.....	.....	.....	.....	.....	.....	
321	408	3,200	85	39,200	398	None	.....	Sept. '58	Nov. '59	Nov. '59	
550	485	3,650	87	46,000	708	.....	.....	.....	.....	.....	
...	1,100	....	...	50,000	.....	4 x 20mm. cannon; 32 x 2.75-in. rockets	Mar. '55	June '53	Mar. '57	Sept. '55	Plus 2-4 Sidewinders.
...	1,100	....	...	.....	.....	.....	Dec. '56	.....	Nov. '57	Dec. '56	
...	M<2	....	...	.....	.....	4 x 20 mm. cannon; 32 x 2.75-in. rockets	Dec. '57	Dec. '57	.....	Aug. '58	Plus 2-4 Sidewinders.
...	M<2	....	...	.....	.....	.....	.....	.....	.....	.....	2-4 Sidewinders
...	M1+	....	...	50,000+	.....	GAR-98 Falcons; 24 x 2.75-in. rockets	Oct. '53	.....	.....	.....	
...	M1+	....	...	50,000+	.....	.....	Oct. '55	Apr. '54	Nov. '55	Oct. '55	Side-by-side seats.
...	M2+	....	...	60,000+	500	MB-1 Genie, GAR-3, GAR-4	Dec. '56	.....	.....	.....	F-106B is tandem two-seater.
1,550	300	1,370	92	24,000	.....	None	Sept. '49	.....	.....	.....	
15000	M2+	....	...	50,000+	.....	Varied loads in external pods	Nov. '56	.....	Nov. '59	.....	Delta wing.
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	
4,650	600+	....	...	.....	.....	2 x 20-mm. cannon	June '54	Aug. '53	June '55	Jan. '55	
4,489	600+	....	...	.....	.....	2 x 20-mm. cannon	June '54	May '53	Apr. '55	Mar. '55	
4,385	600+	....	...	.....	.....	2 x 20-mm. cannon	Oct. '52	Feb. '51	Mar. '56	Sept. '53	Also photo., ECM, tanker and trainer versions
800	650+	....	...	.....	.....	2 x 20 mm. cannon	June '54	Nov. '52	Oct. '56	.....	
640	700+	....	...	.....	.....	4 x 20 mm. cannon	.....	.....	.....	.....	
...	.....	....	...	.....	.....	.....	July '54	.....	Apr. '55	May '55	*Fixed fin area; ruddevator area 705 sq. ft.
...	.....	....	...	.....	.....	.....	Mar. '53	.....	Oct. '53	Nov. '53	Fixed fin area; ruddevator area 952 sq. ft.
...	.....	....	...	.....	.....	.....	Feb. '55	.....	May '55	Dec. '55	Fixed fin area; ruddevator area 952 sq. ft.
...	.....	....	...	.....	.....	.....	July '58	.....	June '59	Dec. '59	Fixed fin area; ruddevator area 940 sq. ft.
20	72	550	37	10,300	.....	.....	1955	.....	1958	1958	
18	70	500	43	6,500	.....	.....	1957	.....	.....	.....	
...	650+	....	...	.....	.....	2 x 20 mm. cannon	.....	.....	.....	.....	
...	M1+	....	...	.....	.....	4 x 20 mm. cannon	.....	.....	.....	.....	First U.S. area-ruled fighter.
...	1,000+	....	...	55,000	.....	4 x 20 mm. cannon	.....	.....	.....	.....	
...	.....	....	...	.....	.....	Sonobuoy, depth charges, missiles	Dec. '52	.....	.....	.....	S2F-3.
...	.....	....	...	.....	.....	.....	.....	.....	.....	Dec. '59	Large overhead radome.
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	Overhead radome.
...	316	3,000	...	25,000	200	.....	.....	.....	.....	.....	STOL capability.
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	Low-level attack
...	.....	....	...	.....	.....	Sonobuoy, depth charges, missiles, etc.	May '59	.....	.....	.....	
...	M2+	....	...	70,000+	.....	1 x T-171 Vulcan; 2 x Sidewinders	Mar. '54	Mar. '59	Oct. '60	Sept. '60	Speed record, 1,404 mph.; altitude, 91,243 Ft.
...	M2+	....	...	70,000+	.....	2 x Sidewinders; 1 x T-171 Vulcan	.....	Mar. '59	Dec. '59	Jan. '60	
...	M2+	....	...	70,000+	.....	1 x T-171 Vulcan; 2 x Sidewinders	.....	.....	Oct. '58	.....	
...	M2+	....	...	70,000+	.....	1 x T-171 Vulcan	.....	.....	.....	.....	
...	300*	....	...	.....	.....	None	.....	.....	Dec. '53	.....	WV-2E is Navy version.
...	.....	....	...	22,000	.....	6 x 20 mm. cannon	May '45	.....	Apr. '54	.....	
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	Electra re-design.
...	450+	....	...	.....	.....	.....	.....	.....	.....	.....	
...	.....	....	...	55,000+	.....	.....	.....	.....	.....	.....	Weather reconn.
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	USAF-NASA joint project.
2,815	250	1,200	90	24,000	700	2 x 20 mm. cannon; 8 rockets	Aug. '53	May '52	June '54	Apr. '54	Navy follow-on award 1/59; French order 2/59.
...	1,200+	....	...	55,000+	.....	4 x 20-mm. cannon	Sept. '54	Sept. '52	.....	Sept. '54	Production completed.
...	1,000+	....	...	.....	.....	None	.....	.....	.....	.....	Production completed.
...	1,000+	....	...	.....	.....	GAR-98 Falcons; 2 MB-1 Genie	.....	.....	.....	.....	
...	.....	....	...	.....	.....	.....	.....	.....	.....	.....	Production phase-out in '59.
...	M2+	....	...	.....	1,000	4 Sparrow III, plus Sidewinders	May '58	.....	.....	.....	BLC from No. 6 onwards.
...	M<3	....	...	70,000+	7,000+	.....	.....	.....	.....	.....	Program cut to 2 prototypes.
...	650+	....	...	45,000+	500+	6 x .50 cal. mg.; 16 x 5-in. HVAR	Apr. '53	Dec. '57	.....	Sept. '53	Or 6 x .50 cal. mg.
...	700	....	...	45,000+	1,150	4 x 20 mm. cannon	July '54	.....	.....	.....	For NATO.
...	650+	....	...	45,000+	500+	4 x 20 mm. cannon	.....	.....	.....	.....	Many F-86D Conversions.
...	650+	....	...	45,000+	.....	.....	May '53	Mid-'53	Sept. '54	.....	
...	1,000+	....	...	50,000+	500+	4 x 20 mm. cannon	Jan. '56	.....	Mid-'56	.....	
...	1,000+	....	...	50,000+	500+	4 x 20 mm. cannon	Aug. '56	May '56	May '57	Mar. '57	Also Fighter-Trainer.
1,185	1,000+	20,000	...	50,000+	1,000+	2 x 20 mm. cannon	Sept. '56	.....	.....	.....	To NASA for high speed research.
...	1,300+	....	...	.....	.....	.....	.....	.....	.....	.....	Design similar to B-70.
...	2,000	....	...	70,000+	.....	None	Sept. '58	Oct. '58	.....	.....	Or GE J85.
850	575	5,550	87	40,000+	1,400	None	Jan. '57	.....	.....	.....	
...	687	7,500	115	40,000+	.....	4 x 20 mm. cannon; Sidewinders	.....	.....	.....	.....	
...	M2	....	...	.....	.....	.....	.....	.....	.....	Aug. '58	Boundary layer control. Ground level ejection
381	492	5,000	79	40,000+	.....	2 x .50 cal. mg.; 14 2.75-in. rockets	Jan. '58	Sept. '56	July '59	Jan. '58	Ground level ejection.
...	M1.2+	....	...	55,000	.....	.....	Apr. '58	Dec. '58	.....	Jan. '60	
...	M2+	....	...	52,200	.....	.....	July '59	.....	.....	.....	
...	72	....	...	50,000+	.....	1 x Vulcan 20-mm. cannon; Sidewinder	Oct. '55	.....	.....	June '59	Extensive navigation, radar, fire control system.
...	M2	....	...	50,000+	.....	1 x Vulcan; 20-mm. cannon; Sidewinder	Oct. '55	.....	May '58	Apr. '58	100 Kilo. speed record, 1,216.48 mph.
124	325	1,900	73	30,000	276	None	Mar. '56	June '56	Nov. '57	Nov. '57	Tandem seats.

U.S. Missiles

	GENERAL				STATUS				AIRFRAME				
Category	Missile name	Military designation	Cognizant service	Prime contractor	Research	Development	Production	Service Use	Manufacturer	Over-all length, less booster, ft.	Over-all span, wings or fins, ft.	Body diameter, ft.	Launching wt., less booster, lb.
Air-to-Air	Eagle	XAAM-N-10	Navy	Bendix	√	√	..	..	Grumman	....	....	....	.....
	Falcon	GAR-1, 2, 3, 4, 9, 11	USAF	Hughes	..	..	√	√	Hughes	6.5	1.8	0.5	100
	Genie	MB-1	USAF	Douglas	..	..	√	√	Douglas	8	.. ..	....	.....
	Sidewinder 1A	AAM-N-7	Navy	Philco/G.E.	..	..	√	√	.....	9	....	0.4	155
	Sidewinder 1C	.....	Navy	Philco	..	√	√	..	.....	....	....	....	.....
	Sparrow I	AAM-N-2	Navy	Sperry	..	..	..	√	Sperry	12	....	....	300
	Sparrow III	AAM-N-6	Navy	Raytheon	..	√	√	√	Raytheon	12	3.3	0.8	350
Air-to-Surface	Bold Orion	.....	USAF	.....	√	..	..	..	Martin	....	....	....	.....
	Bullpup	ASM-N-7 GAM-83A	Navy/USAF	Martin	..	..	√	√	Martin	11	3	1	571
	Corvus	XASM-N-8	Navy	Temco	..	√	..	..	Temco	....	....	....	.....
	Crossbow	.....	.....	Northrop	..	√	..	..	.....	....	....	....	.....
	Gimlet	.....	Navy	.....	√	√	..	..	.....	....	....	....	.....
	Hound Dog	GAM-77	USAF	NAA	..	..	√	..	NAA	40	....	....	.....
	Quail	GAM-72	USAF	McDonnell	..	..	√	..	McDonnell	10	7	1.5	1,100
	Rascal	GAM-63	USAF	Bell Aircraft	..	..	..	√	Bell Aircraft	32	....	4	.....
	Sky Bolt	GAM-87A	USAF	Douglas	√	..	..	..	Douglas	....	....	....	.....
	Wagtail	.....	USAF	Minn.-Honeywell.	..	..	..	..	.....	....	....	....	.....
	Zuni	.....	Navy	.....	..	..	√	..	.....	9	....	0.4	107
Anti-Submarine	Able	.....	Navy	Avco	..	..	√	√	.....	8.5	....	1.1	500
	Asroc	.....	Navy	Minn.-Honeywell	..	..	√	..	Minn.-Honeywell	....	....	....	.....
	Subroc	.....	Navy	Goodyear	√	√	..	..	Goodyear	....	....	....	.....
Surface-to-Air	Bomarc	IM-99B	USAF	Boeing	..	√	√	..	Boeing	4.5	18.2	3	16,000
	Hawk	XM3	Army	Raytheon	√	√	√	..	Nortronics/Raytheon	16	4	1.2	1,250
	Mauler	.....	Army	.....	√	..	..	..	.....	....	....	....	.....
	Nike Ajax	.....	Army	Western Electric	..	..	..	√	Douglas	21	....	1	.....
	Nike Hercules	XM6E3	Army	Western Electric	..	..	√	√	Douglas	27	....	2.5	.....
	Nike Zeus	.....	Army	Western Electric	..	√	..	..	Douglas	....	....	....	.....
	Redeye	.....	Army/USMC	Convair/ARGMA	√	√	..	..	.....	4	....	0.25	20
	Talos	SAM-N-6	Navy	Bendix	..	..	√	..	McDonnell	20	....	2.5	3,000
	Tartar	.....	Navy	Convair	..	√	√	..	Convair	15	....	1.5	.....
	Terrier	SAM-N-7	Navy	Convair	..	..	√	√	Convair	15	....	1.5	3,000[1]
	Davy Crockett	.....	Army	.....	..	√	..	..	.....	....	....	....	.....
Surface-to-Surface	Atlas	SM-65	USAF	Convair	..	√	√	√	Convair	82	....	10	265,000[1]
	Clam	.....	USAF	.....	√	..	..	..	.....	....	....	....	.....
	Slam	.....	USAF	Chance Vought	√	..	..	..	.....	....	....	....	.....
	Cobra	.....	USMC	Daystrom	√	√	√	..	Daystrom	2.6	1.1	0.3	20
	Corporal	M2	Army	Firestone/Gilfillan	..	..	√	√	Firestone	46	....	2.5	12,000
	Honest John	M31	Army	Emerson Elec./Douglas	..	..	√	√	Emerson Elec./Douglas	27	8	2.5	6,000
	.....	XM50	Army	Emerson Elec./Douglas	..	..	√	..	Douglas	25	4.5	2	.....
	Jupiter	.....	Army/USAF	Chrysler	..	..	√	√	Chrysler	59	....	9	110,000
	Lacrosse	M4E2	Army	Martin	..	..	√	√	Martin	19	9	1.7	2,300
	Little John	XM51	Army	Emerson Elec.	..	√	√	√	Emerson Elec.	15	2	1	.....
	Lobber	.....	Army	Convair	..	√	..	..	Convair	9	....	....	.....
	Mace	TM-76	USAF	Martin	..	..	√	√	Martin	44	23	4.5	14,000[1]
	Matador	TM-61	USAF	Martin	..	..	..	√	Martin	40	29	4.5	12,000
	Minuteman	WS-133A	USAF	Boeing	..	√	..	..	.....	....	....	....	.....
	Pershing	.....	Army	Martin	√	√	..	..	Martin	....	....	....	.....
	Polaris	FBM	Navy	Lockheed	..	√	√	..	Lockheed	28	....	....	28,000
	Redstone	.....	Army	Chrysler	..	..	√	√	Chrysler	63	....	6	61,000
	Regulus I	SSM-N-8a	Navy	Chance Vought	..	..	..	√	Chance Vought	33	21	....	12,000
	Regulus II	SSM-N-9a	Navy	Chance Vought	..	..	..	√	Chance Vought	57	20	....	22,000
	Sergeant	.....	Army	JPL/Sperry	..	√	√	..	Sperry	30	6	3	.....
	Shillelagh	.....	Army	Aeronutronics	..	√	..	..	.....	....	....	....	.....
	Snark	SM-62	USAF	Northrop	..	..	√	√	Northrop	67	42	15	50,000
	Thor	SM-75	USAF	Douglas	..	..	√	√	Douglas	62	....	8	110,000
	Titan	SM-68	USAF	Martin	√	√	√	..	Martin	90	....	10	222,000

Abbreviations:

ABL — Allegany Ballistics Labs
ABMA — Army Ballistic Missile Agency
AC — AC Spark Plug
ADC — Aerophysics Development Corp.
APL — Applied Physics Laboratory
Army Ord — Army Ordnance
BuAer — Bureau of Aeronautics
BuOrd — Bureau of Ordnance
FTL — Federal Telecommunications Laboratory
GE — General Electric
GFE — Government furnished equipment

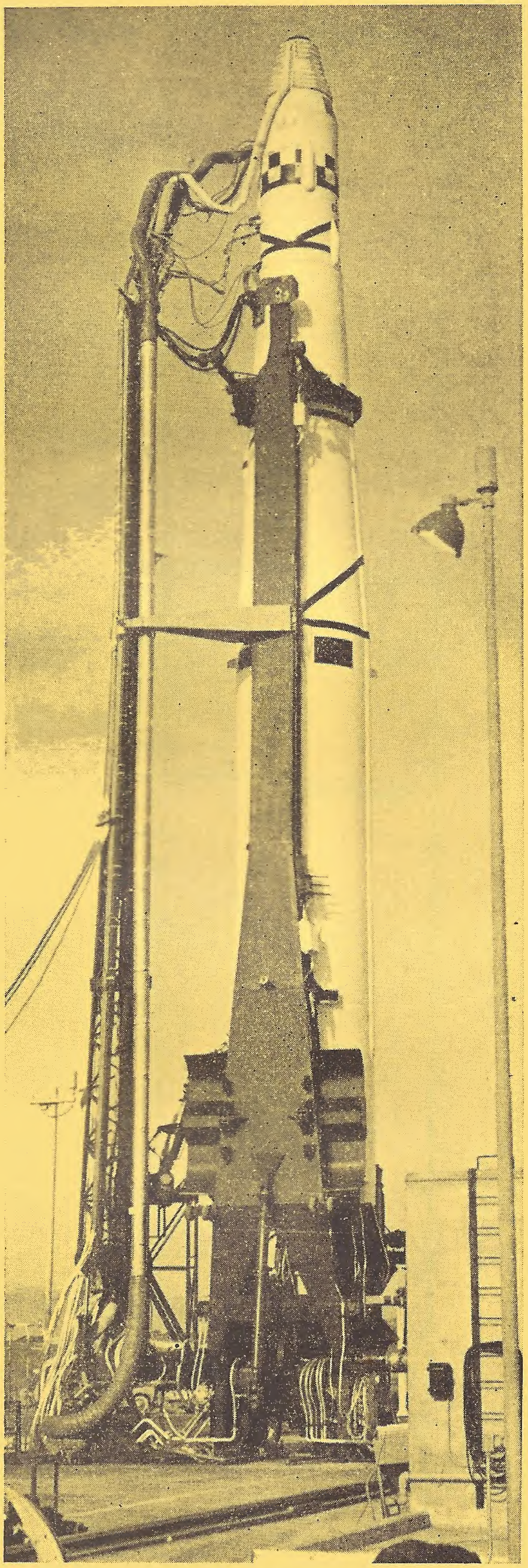
POWERPLANT				GUIDANCE		PERFORMANCE		REMARKS
Manufacturer	No. of engines	Engine designation	Rated thrust, lb.	Manufacturer	Type of guidance	Maximum Mach number	Maximum range ,n. mi.	
Aerojet-General	1	spr.	.....	Bendix	Active radar homing	.....	30+	Long range missile for subsonic aircraft platforms; will have nuclear warhead.
Thiokol	1	spr.	.....	Hughes	Semi-active homing/infrared	.....	.....	GAR-3 and -4 are advanced versions of GAR-1 and -2; 1 and 3 use radar; 2 and 4, infrared, GAR-9 will have longer range and nuclear capability. GAR-11 was for F-108.
Aerojet-General	1	spr.	.....	.....	Unguided	.....	1.5	Nuclear warhead; guided version under development.
Naval Powder Factory	1	spr.	.....	Philco/G.E.	Infrared	.....	2	Developed by NOTS; GAR-8 is USAF version.
.....	..	.....	.....	Philco	Infrared	.....	.....	Advanced Sidewinder under development at NOTS; greater speed and range; formerly called Diamondback.
Aerojet-General	1	spr.	.....	Sperry	Beam rider	2+	5+	Being replaced by Sparrow III.
Aerojet-General	1	spr.	.....	Raytheon	Semi-active radar homing	2+	.....	All weather, all aspect capability; carried in 4's.
.....	..	spr.	.....	.....	.....	.....	.....	Test vehicle for ALBM.
Thiokol	1	lpr.	.....	Martin	Command	1.8	3	Some early Bullpups still using spr. engines; GAM-83B in R&D. White Lance is USAF version
Thiokol	..	lpr.	.....	Texas Instr./W. L. Maxson	.....	1+	.....	Stand-off missile for carrier aircraft; prepackaged lpr. engine Patriot.
.....	..	.....	.....	.....	Homes on enemy radar	.....	.....	
.....	..	.....	.....	.....	Unguided	.....	.....	
P&W	1	J52 tj.	7,500	Autonetics	Inertial	.....	500+	For B-52G.
GE	1	J85 tj.	2,500	.....	.....	0.9	200	Also Green Quail; diversionary missile for B-47; B-52.
Bell Aircraft	3	lpr.	12,000	Bell Aircraft	Radar-command	1.5	100	For B-47.
Aerojet-General	..	spr.	.....	Nortronics	.....	.....	1,000	Air launched ballistic missile, GE nose cone.
.....	..	.....	.....	Minn.-Honeywell	Inertial	.....	.....	
.....	1	spr.	.....	.....	Unguided	3	.....	Five inch folding fin rocket developed by NOTS to replace WW II HVAR; also air-to-air.
.....	..	.....	.....	.....	.....	.....	.....	Fired from gun launchers on destroyer escorts and frigates; variable range.
.....	..	spr.	.....	.....	.....	.....	.....	Developed by NOTS.
Thiokol	..	spr.	.....	Kearfott/Librascope	.....	.....	.....	Fired through torpedo tubes; developed by Naval Ordnance Laboratory.
Marquardt	2	RJ43-MA-3rj.	10,000	Westinghouse	SAGE/active radar homing	2+	400	Spr. booster; replaces shorter range IM-99A with lpr. booster.
Aerojet-General	1	XM22E5 spr.	.....	Raytheon	Semi-active radar homing	.....	22	Low altitude complement to Nike; mobile or fixed site launchers. Effective at intermed. altitudes.
.....	..	.....	.....	.....	.....	.....	.....	Truck transportable tactical weapon for use against low flying aircraft.
Aerojet-General	1	lpr.	2,600	Western Electric	Command	.....	25	One spr. booster.
Thiokol	1	spr.	.....	Western Electric	Command	.....	75+	Four 14.5-ft. Ajax spr. boosters.
Gr. Central/Thiokol	..	spr.	.....	Bell Tel./Sanders Assoc.	Command	.....	.....	Anti-missile missile.
.....	..	.....	.....	Philco/Convair	Infrared	.....	.....	Shoulder-fired weapon for low flying aircraft.
McDonnell	1	rj.	.....	Sperry	Beam rider/semi-active hom'g	2+	65+	Also surface-to-surface; uses spr. booster.
Aerojet	1	spr.	.....	Raytheon	.....	1+	10	Smaller version of original Terrier; designed for destroyer use; dual thrust motor.
Atlantic Research	1	spr.	.....	Sperry	Beam rider	2.5	10	Advanced Terrier now in production; improved guidance; 20-mi. range; spr. booster.
.....	..	.....	.....	.....	.....	.....	.....	Tactical nuclear weapon; man-transportable.
Rocketdyne	3	lpr.	360,000	GE/Burroughs/Arma	Radar-command; inertial	20	5,500+	Two 150,000-lb. thrust lpr. boosters; one 60,000-lb. sustainer, GE MK. III nose cone.
.....	..	RJ	.....	.....	.....	.....	5,500	Possible chemical forerunner to nuclear Slam.
Marquardt	1	Nuclear rj.	.....	.....	Command/inertial	1+	5,500+	Supersonic low alt; NAA & Convair have study contracts.
.....	2	spr.	17.6	.....	Command	0.3	1.0	Wire-guided anti tank missile; made under license from Boelkow, KG, West Germany.
Ryan	1	lpr.	20,000	Gillfillan	Command	3	75	Nuclear and all-weather capability; deployed in Europe.
Hercules	1	spr.	.....	.....	Unguided	.....	15	Highly mobile tactical weapon; deployed in Europe, Japan; GE arming & fuzing.
Hercules	1	XM31E2	.....	.....	Unguided	.....	.....	Improved Honest John with greater range, accuracy.
Rocketdyne	1	lpr.	150,000	Ford Instrument	Inertial	12	1,500	IRBM developed by Army, used by Air Force.
Thiokol	1	M-10E1 spr.	.....	Martin	Command	.....	20	Close tactical support; GE arming & fuzing.
Hercules	1	XM26E1 spr.	.....	.....	Unguided	.....	.....	Close tactical support; GE arming & fuzing.
.....	1	spr.	.....	.....	.....	2	15	Supply missile project; 50 lb. payload.
Allison	1	J33-A-41 tj.	5,200	Goodyear/AC	ATRAN/Inertial	0.9	650+	Improved Matador; high-low altitude capability; spr. booster.
Allison	1	J33-A-37 tj.	3,700	GFE/Martin	MSQ radar/Shanicle	0.9	.....	Tactical weapon; deployed in Europe, Taiwan, Korea; spr. booster.
Thiokol, Aerojet, Hercules	3	spr.	.....	NAA Autonetics	Inertial	20	5,500+	Will be launched from railroad cars, underground silos; Avco nosecone.
Thiokol	2	spr.	.....	Bendix	Inertial	.....	420	Selective range ballistic missile.
Aerojet-General	2	spr.	.....	GE	Inertial	.....	1,200	Launched from subs using Ship's Inertial Navigation System developed by Sperry; 3,000-mi. model planned.
Rocketdyne	1	lpr.	78,000	Ford Instr.	Inertial	.....	200	Deployed in Europe; 1st stage: Mercury capsule.
Allison	1	J33-A-18A tj.	4,600	Sperry	Command	0.9	500	Production ended; nuclear capability; spr booster.
GE	1	J79-GE-3 tj.	10,000+	AC	Command or inertial	2+	1,000+	Improved Regulus I; limited production.
Thiokol	1	spr.	.....	Sperry	Inertial	.....	200	Air transportable; will replace Corporal.
.....	..	.....	.....	.....	.....	.....	.....	Close-in support of troops.
P&W	1	J-57	15,000	Nortronics	Stellar inertial	0.9	5,500	Two spr. boosters; first.
Rocketdyne	1	lpr.	150,000	AC	Inertial	.....	,500	First units in England; GE nose cone.
Aerojet-General	3	lpr.	880,000	AC/BTL/Rem. Rand/IBM	Radar-command, inertial	20	5,500	Avco nose cone; range may reach 9,000 mi.,

Gr.Central — Grand Central Rocket Co.
ICBM — Intercontinental ballistic missile
IRBM — Intermediate range ballistic missile
JPL — Jet Propulsion Laboratory
lpr — liquid propellant rocket
MIT — Mass. Institute of Technology
NOTS — Naval Ordnance Test Station
RMD — Reaction Motors Div. of Thiokol Chemical Corp.
spr — solid propellant rocket
tj — turbojet
tp — turboprop
WeEl — Western Electric
[1] Gross takeoff weight

U.S.–U.S.S.R: Satellites and Space Probes

Name	Origin	Launch Date	Lifetime or End	Dimensions (in.) length x diam.	Weight lb.	Initial Altitude (miles)		Period (min.)	Inclination to Equator (degrees)
						Perigee	Apogee		
Sputnik I	U.S.S.R.	Oct. 4, '57	Jan. 4, '58	22.8	184	142	588	96.2	64.3
Sputnik II	U.S.S.R.	Nov. 3, '57	Apr. 13, '58	.....	1,120	140	1,038	103.7	65.4
Explorer I	U. S.	Jan. 31, '58	3–5 years	80 x 6	30.8	224	1,573	114.8	33.3
Vanguard I	U. S.	Mar. 17, '58	2,000 years	6.4	3.25	409	2,453	133.8	34.3
Explorer III	U. S.	Mar. 26, '58	June 27, '58	80 x 6	31.0	121	1,746	115.9	33.4
Sputnik III	U.S.S.R.	May 15, '58	Est. Mar. 1959	141 x 68 (at base)	7,000 (payload 2,925)	135	1,167	106	65.3
Explorer IV	U.S.	July 26, '58	1 year	80.4 x 6.3	38.4	162.9	1,380	110.2	50.3
Pioneer I	U.S.	Oct. 11, '58	43 hr. 17.5 min.	30 x 29	84.4	.....	.....	.....	.....
Pioneer III	U.S.	Dec. 6, '58	38 hr. 6 min.	23 x 10	12.95	.....	63,580	.....	.....
Project Score	U.S.	Dec. 18, '58	Jan. 21, '59	1020 x 120	8,750 (payload 150)	114.5	928	100	32.3
Mechta	U.S.S.R.	Jan. 2, '59	.....	.....	3,245 (payload 796.67)	91 million (perihelion)	122.5 million (aphelion)	450 days	.....
Vanguard II	U.S.	Feb. 17, '59	200 years	20	23.7	347	2,046	125.9	32.9
Pioneer IV	U.S.	Mar. 3, '59	.....	20 x 9	13.4	91.7 million (perihelion)	106.1 million (aphelion)	.....	.....
Discoverer I	U.S.	Feb. 28, '59	Mar. 5, '59	19.2 x 5	8,500	99	605	95.9	3 deg. off N-S axis
Discoverer II	U.S.	Apr. 13, '59	Apr. 26, '59	230.4 x 60 with 27 x 33 capsule	195 (capsule)	142	220	90.5	Polar
Explorer VI	U.S.	Aug. 7, '59	1 year	29 x 26 (four solar paddles 18 x 18)	142	156	26,357	12.5 hr.	46.9
Discoverer V	U.S.	Aug. 13, '59	.....	Same as Discoverer II	1,700 incl. 300 lb. capsule	136	450	94	Polar
Discoverer VI	U.S.	Aug. 19, '59	.....	Same as Discoverer II	1,700 incl. 300 lb. capsule	139	537	95.3	.....
Lunar Probe	U.S.S.R.	Sept. 12, '59	Impact on moon Sept. 13, '59	.....	858.4	.....	.....	Flight time about 35 hr.	
Vanguard III	U.S.	Sept. 18, '59	30–40 years	20 in. sphere with 26-in. tapered tube	100 (payload 50)	319	2,329	130.2	33.3
Lunar Probe	U.S.S.R.	Oct. 4, '59	.....	.....	614	24,840 (initial)	292,000	15 day (initial)	.....
Explorer VII	U.S.	Oct. 13, '59	20 years	30 x 30	91.5	342	680	101.3	50.3
Discoverer VII	U.S.	Nov. 7, '59	.....	Szme as Discoverer V	1,700 incl. 300 lb. capsule	104	550	95	Polar
Discoverer VIII	U.S.	Nov. 20, '59	.....	Same as Discoverer II	1,700 incl. 300 lb. capsule	120	1,000	.....	Polar
Transit	U.S.	.....	.....	36	265	.....	.....	.....	.....
Midas	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Samos	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Courier	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Decree	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Steer	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Mercury	U.S.	.....	.....	.....	2,400	110 (est.)	120 (est.)	.....	.....
Tiros	U.S.	.....	.....	.....	.....	.....	.....	.....	.....
Echo	U.S.	.....	.....	100 ft. inflatable sphere	.....	900 mi. circular orbit (est.)	.....	.....	Est. 50
Thor-Able IV	U.S.	.....	.....	26 in. plus four solar paddles	90	.....	.....	.....	.....
Nimbus	U.S.	.....	6 mos.	.....	650	600 N. M. (circular)	.....	.....	Polar
Nerv	U.S.	.....	.....	.....	.....	.....	2–10,000 (est).	.....	.....

Launching Vehicle				Remarks
Designation	Stages	Thrust (lb.)	Weight (lb.)	
.....	...	.. ....	.....	First artificial satellite; recorded internal temperatures and pressures.
.....	...	.....	.....	Led to discovery of significant solar influence on upper atmosphere densities.
Jupiter-C	4	84,000	64,000	Discovered Van Allen radiation belt.
Vanguard	3	36,000	22,600	Tested solar batteries; revealed pear-shaped Earth.
Jupiter-C	4	84,000	64,000	Recorded cosmic ray intensity and incidence, micrometeorite data.
.....	...	.....	.....	Analyzed cosmic radiation; measured tension of Earth's electrostatic field and magnetic field, atmospheric composition.
Jupiter-C	4	84,000	64,000	Measured corpuscular radiation.
Thor-Able I	3	160,000	111,000	First determination of density of micrometeors in space; first measurements of interplanetary magnetic field.
Juno II	4	151,000	121,000	Discovered 2nd radiation belt around Earth.
Atlas 10-B	1½	360,000	244,000	First time human voice beamed from outer space. Accepted and relayed messages from ground stations.
.....	...	.....	.....	First to reach vicinity of the moon; first man-made asteroid.
Vanguard	3	36,000	22,600	Cloud cover satellite.
Juno II	4	151,000	121,000	Earth-Moon trajectory; yielded excellent radiation data.
Thor-Agena	2	165,000	108,400	
Thor-Agena	2	165,000	108,400	Total payload weight is 440 lb.
Thor-Able III	3	160,000	105,000	Solar energy primary power source; used Telebit digital telemetry system to store, tally and transmit data.
Thor-Agena	2	165,000	105,000	Payload capsule ejected but not recovered.
Thor-Agena	2	165,000	105,000	
.....	...	.....	.....	Traveled 236,875 miles. Impact velocity more than 2 mi. sec.
Vanguard	3	39,000	22,600	Measuring earth's magnetic field, intensity of solar x-rays, and frequency of micrometeorite impacts.
.....	...	.....	.....	Took first picture of far side of the moon.
Juno II	4	151,000	121,000	Studied direct solar radiation.
Thor-Agena	2	165,000	108,400	Launched from Pacific Missile Range into polar orbit.
Thor-Agena	2	165,000	108,400	Capsule ejected 26 hrs. after launch; missed target area, was not found.
Thor-Able	2	160,000	105,000	NAVY/ARPA developmental navigation satellite.
Thor-Agena B and Atlas-Agena B	2	.....	.....	USAF infrared early warning satellite.
Thor-Agena B and Atlas-Agena B	2	.....	.....	USAF reconnaissance satellite.
.....	...	.....	.....	ARPA developmental teletype repeater communication satellite.
.....	...	.....	.....	ARPA developmental 24-hr. orbit communications satellite.
.....	...	.....	.....	ARPA developmental polar communications satellite. GE vehicle; Bendix communications equip.
Atlas D	1½	360,000	244,000	Manned orbital capsule, planned for launch by NASA in 1961.
hor-Able	2	160,000	105,000	NASA meteorological satellite with two television cameras.
elta	3	160,000	105,000	NASA passive communications satellite launch vehicle is modified Thor-Able.
Thor-Able	3	160,000	105,000	NASA solar satellite; to travel between orbits of venus, earth and test radio communications at 50 million mi. or more.
Thor-Agena B	2	180,000	113,000	Earth-oriented meteorological satellite using advanced televisions, scanning and non-scanning infrared; spectrometer and radar on later versions.
Argo D4	4	.....	.....	Deep space probe to measure earth radiation belt; GE developing for NASA.



Thor/Agena for launching Discoverer IX.

U. S. Research and Test Vehicles

CATEGORY	Vehicle name	GENERAL		AIRFRAME			
		User	Prime Contractor	Manufacturer	Overall length less booster, ft.	Body diameter, ft.	Launching wt. less booster, lb.
Satellite Vehicles	Atlas Able	USAF/NASA	STL	Convair	99′ 4″	10	.....
	Atlas Centaur	NASA	Convair	Convair	107′ 8″	.....	.....
	Atlas-Agena	USAF/NASA	Lockheed Aircraft	Convair/Lockheed	88′ 2″	10	.....
	Juno II	NASA	NASA Huntsville	Chrysler	76.5	8.8	121,000
	Little Joe	NASA	.....	North American	44.5	6.5	.....
	Nova	NASA	.....	.....	.....	.....	.....
	Saturn	NASA	NASA-Hunts.	NASA-Hunts.	.....	.....	.....
	Scout	NASA	Chance Vought	Chance Vought	.....	.....	.....
	Thor-Agena	USAF/NASA	Lockheed Aircraft	Douglas/Lockheed	79′	8	.....
	Thor-Able	USAF/NASA	Space Technology	Douglas	88.1	8	.....
Test Vehicles	Cherokee	USAF	Cook Electric	.....	25	4.2	4,500
	Cree	USAF	Cook Electric	.....	.....	.....	.....
	Pogo-Hi	.....	U. of New Mexico	.....	.....	.....	.....
	Skokie I	USAF	Cook Electric	.....	25	1.7	2,400
	X-7	USAF	Lockheed Aircraft	.....	.....	.....	.....
	X-17	USAF	Lockheed Aircraft	.....	40	.....	.....
Research Vehicles	Aerobee.....	....Army-Navy-USAF	Aerojet-General	Aerojet-General	19	1.3	.....
	Aerobee 75	Army	Aerojet-General	Aerojet General	19	1.2	.....
	Aerobee 150	Navy-USAF	Aerojet-General	Aerojet-General	21	1.3	.....
	Aerobee 300	USAF	Aerojet-General	Aerojet-General	.....	1.3	.....
	Arcas	Navy	Atlantic Research	Atlantic Research	6.5	0.4	77
	Arcas Robin	USAF	Atlantic Research	Atlantic Research	6	4.5	73
	Arcon	NASA	Atlantic Research	Atlantic Research	11.1	0.5	254
	Asp I	Navy	Cooper Development	Cooper Development	12	0.5	216.5
	Ascamp	.....	Cooper Development	Cooper Development	18.3	0.54	286.5
	Aspan 150	.....	Cooper Development	Cooper Development	26.4	1.4	1,503
	Cajun	USAF	U. of Michigan	.....	13.3	0.5	254
	Dan	Navy	Cooper Development	Cooper Development	27	0.5	1,482
	Deacon	NASA	ABL/Hercules	ABL	9.2	0.5	153
	Hasp	Navy	Cooper Development	Cooper Development	6	0.3	.....
	HTV-1 HTV-2	USAF USAF	Curtiss-Wright Curtiss-Wright	Curtiss-Wright Curtiss-Wright	13	0.8	220 .....
	Iris	NASA	Atlantic Research	Atlantic Research	19	1	1,2
	Jason	NASA	.....	.....	55	.....	7,00
	Nike-Nike	USAF	Marquardt	Cooper Development	22.2	1.3	2,540
	.....	AEC	Cooper Development	Cooper Development	20.4	0.5	408
	Rockair	Navy	.....	.....	4	0.2	18
	Rockaire	USAF	Douglas	.....	8.9	0.8	181
	Roksonde 200	.....	Cooper Development	Cooper Development	8.7	0.25	23
	Wasp	Navy	Cooper Development	Cooper Development	.....	.....	.....

POWERPLANT				
Manufacturer	No. of engines	Engine Designation	Rated thrust, lb.	REMARKS
N.A.A. Rocketdyne Aerojet-General Allegany Ballistic Lab. STL	3 1 1 1	lpr AJ-10 lpr ABL-248 spr spr	360,000 7,500 2,500	Also known as Able IV Atlas; 4th stage retrorocket; carrier for NASA lunar vehicle.
Rocketdyne; P&W	5	lpr	390,000	High energy general-purpose space vehicle; Convair 2nd stage.
N.A.A. Rocketdyne Bell Aircraft	3 1	lpr epr	360,000	Reconnaissance satellite; will use Atlas. Launch vehicle for Midas and Samos satellites, NASA satellites and probes.
N.A.A. Rocketdyne JPL	1 15	lpr spr	150,000 1,000	Four-stage carrier for Pioneer III and for lunar probe and satellites; first stage a modified Jupiter; upper stages scaled down Sergeant rockets.
Thiokol	8	spr	360,000	Used in testing Mercury capsule.
N.A.A. Rocketdyne N.A.A. Rocketdyne	4 1	lpr lpr	6,000,000 1,500,000	Up to five stages depending upon mission; stages 3 and 4 liquid hydrogen and oxygen; 5th storable lpr engine; 1st launch 1968.
N.A.A. Rocketdyne	8	lpr	1,500,000	Super booster now in R&D phase. Up to 5 stages; all upper stages hydrogen and oxygen; 1st launch 1962.
Aerojet-General Thiokol Hercules	.. .. ..	....	....	Basic mission is to place 150-lb. payload in a 300-mi. orbit
N.A.A. Rocketdyne Bell Aircraft	1 1	lpr lpr	150,000	Two-stage carrier for Discoverer satellite; will use Thor 1st stage, engine developed by Bell for B-58 pod as 2nd stage. Agena B will have increased thrust, restart capability.
N.A.A. Rocketdyne Aerojet-General Allegany Ballistic Lab. Thiokol Chemical	1 1 1 1	lpr AJ-10 lpr spr ABL-248 spr	150,000 7,500 2,500	Also known as Able I; carrier for Pioneer II lunar probe; 2nd stage is Vanguard 2nd stage; 4th stage is Falcon motor used as a retrorocket. Thor-Delta has guidance in 2nd stage.
.....	1	spr	50,000	Test vehicle for ejection seat development; air launched.
.....	..	.....	.....	Supersonic vehicle will be used by WADD to test 14–18 in. parachutes for missiles, drones and escape capsules.
.....	..	.....	.....	Infra-red, high altitude target for heat-homing missiles.
.....	3	spr	33,000	Air-launched parachute test vehicle; Skokie II is Mach 2 version.
.....	1	rj	.....	Ramjet engine test pod.
Thiokol Chemical	5	spr	.....	Three-stage re-entry test vehicle.
Aerojet-General	1	lpr	4,000	Sounding rocket; 150-lb payload to 70 mi.
Aerojet-General	1	dual thrust spr	.....	Sounding rocket; 90-lb. payload to 75 mi. (Aerobee Hawk).
Aerojet-General	1	lpr	4,100	Was Aerobee-Hi; 150-lb. payload to 150 mi.
Aerojet-General	1 1	lpr spr	4,100	Sounding rocket; 50-lb. payload to 300 mi.
Atlantic Research	1	spr	350	Sounding rocket; 12-lb. payload to 40 mi. altitude.
Atlantic Research	1	spr	350	Sounding rocket; 8-lb. payload to 40 mi. altitude.
Atlantic Research	1	spr	945	Sounding rocket; 40-lb. payload to 61 mi. altitude.
Cooper Development	1	spr	5,850	Sounding rocket; 10–85-lb. payload to 130,000–230,000 ft. altitude; AspIV has 550,000-ft. altitude capability.
.....	2	spr	.....	Will carry 10–70 lb. payloads to 50–150 mi. altitude. Nike Ascamp uses Nike booster to carry 20–70 lb. payload to 250–400 mi. altitude.
.....	2	spr	.....	Will carry 20–80 lb. payload to 125–200 mi. altitude; Aspan 300 to 225–425 mi. altitude.
Thiokol Chemical	1	spr	8,300	Nike-Cajun offered by Cooper Development uses Nike JATO M-5 as booster.
.....	1 1	Nike JATO M-5 Deacon spr	....	Two-stage sounding rocket; 50-lb. payload to 75 mi.
ABL/Hercules	1	spr	.....	Sounding rocket.
Cooper Development	..	.....	3,300	Weather rocket; 35-mi. altitude capability.
Grand Central Grand Central/Thiokol	11 8	Arrow I Arrow I, Recruit	....	Two stage spr. hypersonic test vehicle. Three stage spr. hypersonic test vehicle.
Atlantic Research	1	spr	4,510	Sounding rocket; 100-lb. payload to 190 mi. altitude.
Radford/Hercules	5	spr	.....	Five-stage research vehicle; consists of Honest John, 2 Nike boosters, Recruit and T-55 engine.
Radford/Hercules Thiokol Chemical	1 1	Nike JATO M-5 spr	....	Two-stage sounding rocket; 50-lb. payload to 105 mi. Another version of Nike Cajun.
JPL Cooper Development	1 1	6″-427 Asp I spr	....	Two-stage sounding rocket; recoverable payload.
Sunflower/Hercules	1	spr	.....	2.75-in. FFAR rocket instrumented for sounding experiments.
.....	1	DM-16 JATO	7,800	Air-launched sounding rocket; 40-lb. payload.
.....	1	spr	.....	Can carry small payloads above 200,000 ft.
Cooper Development	..	.....	.....	Weather sounding vehicle.

U. S. Gas Turbine Engines

Manufacturer and Address	Designation	Type	No. of compressor stages: axial, centrifugal	No. of turbine stages	No. of combustors	Max. power at S. L.	Specific fuel consumption at max. power, lb. hr. lb. t. or eshp.	Compression ratio at max. rpm.	Max. envelope diameter, in.	Max. envelope length, in.	Dry weight, less tailpipe, lb.	Remarks
Avco Manufacturing Corp. **Lycoming Division** *Stratford, Conn.*	T53-L1	ACS	5,1	1	....	860 shp.	0.77	6	23	47.6	480	HU-1A, H-43B.
	T53-L-3	ACP	5,1	1	....	960 shp.	0.687	6	23	58.9	530	AO-1.
	T53-L-5	ACS	5,1	1	....	960 shp.	0.696	6	23	47.6	485	Will power HU-1B.
	T55-L-1	ACP	7,1	1	....	1,600 shp.	0.679	6.3	24.25	58.8	695	
	T55-L-3	ACS	7,1	1	....	1,940	0.670	6.3	24.25	44	600	Will power YHC-1B.
	T55-L-5	ACP	7,1	1	....	2,200	0.595	6.3	24.25	44	570	
Boeing Airplane Co. *Seattle, Wash.*	502-10CA	CS	1	2	2	270 shp.	0.97	4.1	24	41.5	330	
	502-10S	CS	1	2	2	360 shp.	0.90	4.47	24	41.5	325	Radioplane RP-77D.
	502-11B	CFG	2	2	2	205 air hp.	.....	3.5	28.5	50	350	Compressed air output.
	T60 (520-2)	CS	1	2	2	430 shp.	0.72	6.25	25.5	57.32	325	Helicopter type.
	502-10V	CS	1	2	2	270 shp.	1.02	4.40	24	41.5	280	Turboshaft.
	502-10W	CS	1	2	2	325 shp.	0.89	4.56	24	41.5	325	Turboprop.
	502-10WA	CS	1	2	2	285 shp.	0.93	4.35	24	41.5	300	Turboshaft.
	520-4	CS	1	2	2	475 shp.	0.71	6.52	25.5	68.67	325	Turboprop.
	520-6	CS	1	5	2	550 shp.	0.65	6	25.5	57.32	260	Turboshaft.
	520-8	CS	1	2	2	550 shp.	0.65	6	25.5	68.67	275	Turboprop.
Continental Aviation & Engr'g. Corp. *Detroit, Mich.*	J69-T-25	CFJ	1	1	1	1,025 lb. t.	1.14	.....	24.9	50	364	Cessna T-37B.
	J69-T-29	ACJ	2	1	1	1,700 lb. t.	1.10	.....	.....	46.3	335	Ryan Q-2C.
	T51-T-3	CFP	1	2	1	425 eshp.	0.97	.....	.....	36	236	
	Model 217-5A	ACP	2	3	1	500 bhp.	0.67	.....	19.38	43.25	245	6,000 rpm.
	Model 217-6A	ACS	2	3	1	500 bhp.	0.67	.....	19.38	48.63	245	2,100 rpm.
	Model 324	ACJ	2	2	1	550 lb. t.	0.97	.....	16.4	56.8	214	
	Model 320	CFJ	1	1	1	360 lb. t.	1.23	.....	16.5	35.5	158	
	Model 141	CFJ	1	1	1	191 air hp.	.....	.....	.....	.....	197	For pressure-jet helicopter.
Curtiss-Wright Corp. **Wright Aeronautical Division** *Wood-Ridge, N. J.*	J65-W-5	AFJ	13	2	1	7,200 lb. t.	.....	.....	37.5	109	2,750	
	J65-W-7	AFJ	13	2	1	7,800 lb. t.	.....	.....	37.5	115	2,795	
	J65-W-16-16A	AFJ	13	2	1	7,700 lb. t.	.....	.....	37.5	113	2,757	
	J65-W-18	AFJ	13	2	1	10,500 lb. t.	.....	.....	37.5	181	3,485	
	.....	.....	2	2	1	.....	2.08	2.75	11	15	30	Turbo-Mite APU Gas Turbine, Direct Drive at 24,000 RPM.
General Electric Co. **Aircraft Gas Turbine Division** *Evendale, Ohio.*	J47-25	AFJ	12	1	8	7,200 lb. t.	1.060	5.35	36.75	145	2,554	B-47E, water/alcohol injection.
	J47-27	AFJ	12	1	8	5,970 lb. t.	1.060	5.35	36.75	148	2,607	F-86F, non-afterburning.
	J47-33	AFJ	12	1	8	7,650 lb. t.	1.15	5.35	36.75	228	3,196	F-86D, afterburner.
	J73-3	AFJ	12	2	8	8,920 lb. t.	0.917	7.0	36.75	147.2	3,650	F-86H, non-afterburning.
	J79-2	AFJ	17	3	10	15,000 lb. t.	.....	12	38.31	204	3,200*	F4H-1, A3J.
	J79-3A	AFJ	17	3	10	15,000 lb. t.	.....	12	38.31	204	3,200*	F-104A, B, Regulus II.
	J79-5	AFJ	17	3	10	15,000 lb. t.	.....	12	38.31	204	3,200*	B-58.
	J79-7	AFJ	17	3	10	15,000 lb. t.	.....	12	38.31	204	3,200*	CF-104, F-104C, D, F, G; F11F-1F.
	J79-8	AFJ	17	3	10	15,000 lb. t.	.....	12	38.31	204	3,200*	F4H-1, A3J.
	J93-3	AFJ	.....	.....	....	.....	.....	.....	.....	.....	.....	B-70.
	X211 Nuclear	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	Convair WS-125A bomber.
	TF35	BPJ	17	3	10	15,000 lb. t.	.....	12	32[1] 53[2]	144	3,700	
	CJ-805-3	AFJ	17	3	10	11,200 lb. t.	.806	12	32	189**	2,800	Convair 880 jetliner.
	CJ-805-3B	AFJ	17	3	10	11,650 lb. t.	.806	12	32	189**	2,800	Convair 880M jetliner.
	CJ-805-23	BPJ	17	3	10	16,100 lb. t.	.541	12	32[1] 53[2]	144	3,700	Aft Fan, Convair 600 jetliner, Caravelle Mark VII.
Small Aircraft Engine Dept. *Lynn, Mass.*	T58-GE-6	AFS	10	2+1	1	1,050 shp.	0.64	8.3:1	16	55	271	HU2K-1, HSS-2, YHC-1A, M224 (VTOL), K-16 (VTOL).
	T58-GE-8	AFS	10	2+1	1	1,250 shp.	0.61	8.3:1	16	55	285	First step growth; Qualified 1960.
	CT-58-100	AFS	10	2+1	1	1,050 shp.	0.64	8.3:1	16	55	280	Civil counterpart of T58-6, Vertol 107, Model II; S-61. S-62.
	J85-GE-5	AFJ	8	2	1	3,850 lb. t.	2.20	7:1*	**20.2**	**104.2**	**525**	**Northrop T38A, N156F.**
	T64-GE-2	AFS	14	2+2	1	2,650 shp.	0.506	12.6:1	30	91	854	
	T64-GE-4	AFP	14	2+2	1	2,570 eshp.	0.522	12.6:1	36	113	1,079	T64-GE-8 Reduction gearing above engine center-line; perf. same as -4.
	T64-GE-6	AFS	14	2+2	1	2,650 shp.	0.498	12.6:1	30	62	710	Direct drive configuration.
	CF-700-1	AFF**	8	2	1	4,000 lb. t.	0.69	7:1*	33	70	585	McDonnell 220C, J85 gas generator plus scaled-down version of CJ-805-23
	J85-GE-7					**2,450 lb. t.**	**0.975**		**17.7**	**42**	**325**	**McDonnell GAM-72.**
Garrett Corp. **AiResearch Mfg. Co.** *Phoenix, Ariz.*	GTP70-20	RCS	2	1	1	160 shp.	1.04	3.50	28.6	31.0	175	Helicopter type weight includes starter motor & accessories.
	GTC85-135	RCC	2	1	1	210 shp.	1.19	3.72	34.2	39.0	230	McDonnell 120 helicopter weight includes starter motor & access.
	GTP225B	RCS	2	1	1	308 shp.	1.16	4.30	29.5	41.9	265	Helicopter type weight includes starter, motor & access.
General Motors Corp. **Allison Division** *Indianapolis, Ind.*	J33-A-41	CFJ	1	1	14	5,100 lb. t.	1.14	4.35	52	156	1,520	
	J71-A-2	AFJ	16	3	....	10,000 lb. t.	.....	.....	43	285	4,017	
	T56-A-1	AFP	14	4	6	3,750 eshp.	0.54	9.25	40	145	1,645	
	T56-A-7	AFP	14	4	6	4,050 eshp.	.....	.....	.....	.....	.....	
	T56-A-8	AFP	14	4	6	4,050 eshp.	.....	.....	.....	.....	.....	
	T56-A-9	AFP	14	4	6	3,750 eshp.	.....	.....	.....	.....	.....	
	T56-A-10W	AFP	14	4	6	4,585 eshp.	.....	.....	.....	.....	.....	Water/alcohol injection.
	501-D13	AFP	14	4	6	3,750 eshp.	0.54	9.25	36	145	1,645	Lockheed Electra.
	T63 turboprop	ACP	7, 1	.....	1	250 eshp.	0.70	.....	19.5	38.5	110	Single-stage gas producer, two-stage power turbine.
	T63 turboshaft	ACP	7, 1	.....	1	250 hp.	0.70	.....	19.5	34.6	95	Max. width 15.8 in.
Solar Aircraft Co. *San Diego, Calif.*	T62	CS	1	1	1	80 shp.	1.10	3.42	15.6	24.7	5.20	Single shaft, constant-speed; T66 is variable speed.

Abbreviations:

*—Approximate
ACJ—Axial-centrifugal turbojet
ACS—Axial-centrifugal shaft turbine
AFP—Axial-flow turboprop
CFJ—Centrifugal-flow turbojet
CS—Centrifugal shaft turbine
AFF—Axial-flow fan
Eshp.—Equivalent shaft horsepower
Lb. t.—Pounds thrust
Shp—Shaft horsepower
[1]—Basic engine
[2]—Aft. Fan

Manufacturer and Address	Designation	Type	No. of compressor stages: axial, centrifugal	No. of turbine stages	No. of combustors	Max. power at S. L.	Specific fuel consumption at max. power, lb. hr. lb. t. or eshp.	Compression ratio at max. rpm.	Max. envelope diameter, in.	Max. envelope length, in.	Dry weight, less tailpipe, lb.	Remarks
United Aircraft Corp. **Pratt & Whitney Aircraft Division** *E. Hartford, Conn.*	PT2G-7	AFP	13	3	8	7,500 eshp.	.55	6.7	34.06	155	2,870	
	JT3C-12	AFJ	16	3	8	13,000 lb. t.	.82	13	38.88	.....	3,495	
	JT3D-3	AFF	15	3	8	18,000 lb. t.	.535	13	53	.....	4,130	
	JT3D-9	AFF	15	3	8	20,000 lb. t.	.595	13	53	.....	5,120	
	JT4A-11, -12	AFJ	15	3	8	17,500 lb. t.	.84	12	43	.....	5,100	12 weight 4,895.
	JT12A-6	AFJ	9	2	8	3,000 lb. t.	.95	6.5	21.9	76	436	
	JT12A-8	AFJ	9	2	8	3,300 lb. t.	.995	6.5	.....	.....	465	
	JT12A-10	AFJ	9	2	8	3,000 lb. t.	.96	6.5	21.9	76	452	
	J57-P-20	J	16	3	8	18,000 lb. t.	2.35	13	38.9	253	4,750	JT3C-26.
	TF33-P-3	AFF	15	3	8	17,000 lb. t.	.52	13	53	.....	3,900	JT3D-2.
	TF33-P	AFF	15	3	8	18,000 lb. t.	.535	13	53	.....	3,950	JT3D-4.
	J60-P-3	AFJ	9	2	8	3,000 lb. t.	.96	6.5	21.9	76	436	JT12A-5.
	J60-P	AFJ	9	2	8	3,300 lb. t.	.995	6.5	21.9	76	440	JT12A-7.
	T34-P-9W	AFP	13	3	8	7,500 eshp.	0.55	6.7	34.00	155.12	2,870	PT26-6.
	JT3C-6	AFJ	16	3	8	13,500 lb. t.	0.775	13	38.88	.....	4,234	Civil J57.
	JT3C-7	AFJ	16	3	8	12,000 lb. t.	0.785	13	38.88	.....	3,495	Civil J57.
	JT3D-1	AFF	15	3	8	17,000 lb. t.	0.52	13	53	.....	4,025	Civil TF-33 turbofan.
	J57-P-43W	AFJ	16	3	8	13,750 lb. t.	0.95	13	38.9	167.33	3,870	JT3C-2.
	J57-P-16, -55	AFJ	16	3	8	16,900 lb. t.	2.30	13	38.9	250.84	4,750	JT3C-21.
	JT4A-9, -10	AFJ	15	3	8	16,800	0.81	12	43	144.1	5,050	-10 weight, 4,845 lb. civil J75.
	J75-P-17	AFJ	15	3	8	24,500	2.15	12	43	237.6	5,875	Afterburning JT4A-28.
	J75-P-19W	AFJ	15	3	8	26,500	2.20	12	43	259.3	5,960	Afterburner, water injection. JT4A-29.
	J60-P	AFJ	9	2	8	2,900 lb. t.	0.93	6.5	21.9	76	436	JT12A-1.
	J60-P	AFJ	9	2	8	3,900 lb. t.	2.30	6.5	21.9	126	651	JT12A-20.
	J58	AFJ	.....	.....	....	30,000+ lb. t.	.....	.....	.....	.....	.....	JT11.
	J52	.....	.....	.....	....	7,500 lb. t.	.....	.....	.....	.....	.....	JT8.
Westinghouse Electric Corp. **Aviation Gas Turbine Div.** *Kansas City, Mo.*	J34-WE-34	AFJ	11	2	1	3,250 lb. t.	1.06	3.85	27	122	1,194	
	J34-WE-36	AFJ	11	2	1	3,400 lb. t.	1.04	4.3	27	111.5	1,184	
	J34-WE-46	AFJ	11	2	1	3,400 lb. t.	1.048	4.3	27	111.5	1,210	In T2J-1.
	J34-WE-48	AFJ	11	1	1	3,400 lb. t.	1.048	4.43	27	111.5	1,175	In T2J.

Abbreviations:

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CFJ—Centrifugal-flow turbojet
CS—Centrifugal shaft turbine
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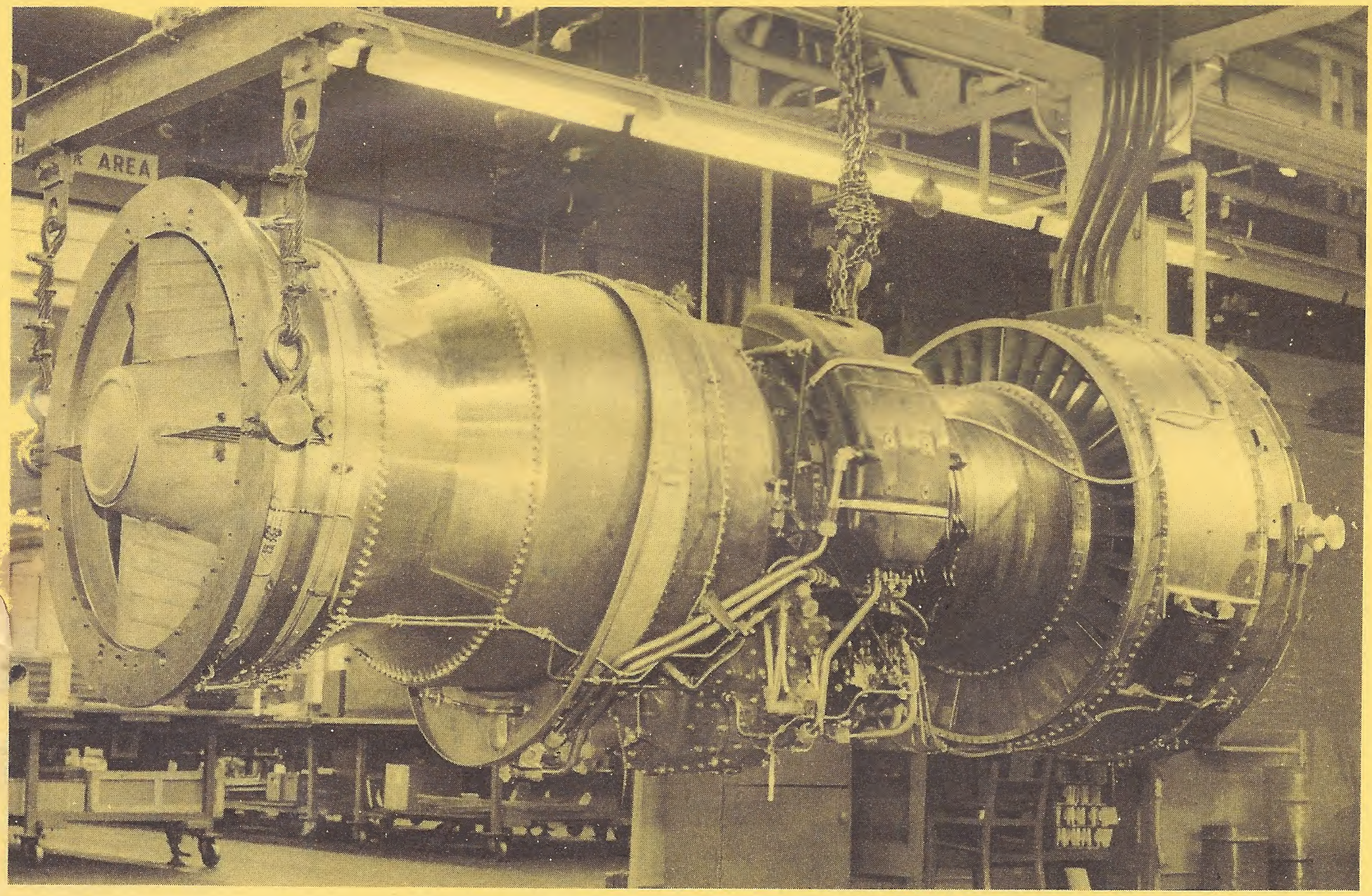
Eshp.—Equivalent shaft horsepower
Lb. t.—Pounds thrust
Shp—Shaft horsepower
1—Basic engine
2—Aft. Fan



Leading Foreign Gas Turbines

Manufacturer and Address	Designation	Type	No. of compressor stages	No. of turbine stages	No. of combustors	Max. power @ S. L.	Specific fuel consumption at max. power	Compression ratio at max. rpm.	Maximum envelope diameter, in.	Maximum envelope length, in.	Dry weight, less tailpipe, lb.	Remarks
CANADA												
Orenda Engines, Ltd. *Malton, Ont.*	Orenda 10	AFJ	10	1	6	6,355 lb. t.	1.12	5.3	42	123	2,515	
	Orenda 11	AFJ	10	2	6	7,275 lb. t.	0.99	6.1	45	121	2,425	
	Orenda 14	AFJ	10	2	6	7,275 lb. t.	0.99	6.1	45	121	2,425	
	Iroquois PS-13	AFJ	10	3	An.	20,000+lb. t.	.....	8	47	228	4,650	
GREAT BRITAIN												
Blackburn & General Aircraft, Ltd. *Brough, E. Yorkshire*	Palouste 502	CFJ	1C	2	A	2.0 lb. air/sec.	1.48	3.77	17.5	33.4	215	Specific fuel consumption based upon air horse power.
	Palouste 505	CFJ	1C	2	A	2.7 lb. air/sec.	1.26	3.81	17.5	33.4	213.5	
	Artouste 510	CFJ	1C	2	A	2.18 lb. air/sec.+ 100 shp.	350 lb./hr.*	3.61	17.5	37.0	235	*Actual fuel consumption.
	Artouste 510	CFJ	1C	2	A	2.6 lb. air/sec.	320 lb./hr.*	3.53	17.5	37.0	235	*Actual fuel consumption.
	Artouste 600	CFJ	1C	2	A	475 shp.	0.98	4.0	17.5	54.0	295	Length includes cone.
	Palas 600	CFJ	1C	1	A	390 lb. t.	1.2	4.09	17.5	43.5	170	
	A. 129	ACFJ	2A, 1C	2×1	A	970 shp.	0.68	6.5	28.87	61.59	390	P. 531 helicopter.
	Turmo 603	CFJ	1C	1×1	A	425 shp.	1.105	3.86	26.4	47.9	370	
Bristol Siddeley Engines, Ltd. *Filton, England*	Double Mamba 3	AFP	10	3	A	3,145 eshp.	0.72	5.35	53	99	2,180	Gannet.
	Double Mamba 8	AFP	11	3	A	3,880 eshp.	0.66	5.85	56	103	2,460	Gannet.
	Viper 8	AFJ	7	1	A	1,750 lb.	1.07	4.1	24.3	67	510	Provost Mk. 3.
	Viper 9	AFJ	7	1	A	1,900 lb.	1.12	4.25	24.3	67	510	Uprated ASV. 8, 326 prototype.
	Viper 11	AFJ	7	1	A	2,460 lb.	1.04	4.37	24.5	64	549	MB. 326 Macchi.
	Viper 12	AFJ	7	1	A	2,700 lb.	1.08	4.47	24.5	64	549	Uprated ASV. 11.
	Sapphire 6	AFJ	13	2	A	8,200 lb.	0.87	7.25	37.4	110	2,670	Javelin.
	Sapphire 7	AFJ	13	2	A	11,000 lb.	0.88	7.49	37.5	125	3,110	Javelin, Victor.
	Sapphire 7R	AFJ	13	2	A	12,230 lb.	1.38	7.49	37.4	131	3,110	Limited afterburner—Javelin.
	Proteus 705	ACFP	12A, 1C	2, 2	8	3,900 eshp.	0.62	7.2	40	100.6	3,005	Britannia 102.
	Proteus 755	ACFP	12A, 1C	2, 2	8	4,160 eshp.	0.60	7.2	40	100.6	2,900	Britannia 300.
	Proteus 765	ACFP	12A, 1C	2, 2	8	4,445 eshp.	0.60	7.2	40	100.6	2,900	Britannia 250, 310, 320.
	Olympus 101	AFJ	6, 8	1, 1	10C	11,000 lb.	.815	.....	40	142.7	3,670	Vulcan B Mk. 1.
	Olympus 102	AFJ	7, 8	1, 1	10C	11,600 lb.	.830	.....	42.4	146.75	3,800	Vulcan B Mk. 1.
	Olympus 104	AFJ	7, 8	1, 1	10C	13,500 lb.	.....	.....	42.4	146.75	.....	Vulcan B Mk. 1.
	Olympus 200	AFJ	5.7	1, 1	8C	16,000 lb.	.....	.....	41.6	139.3	.....	
	Olympus 201	AFJ	5.7	1, 1	8C	17,000 lb.	.....	.....	41.6	139.3	.....	Vulcan B Mk. 2.
	Orpheus 701	AFJ	7	1	A	4,700 lb.	1.057	4.39	32.4	83.25	795	Folland Gnat.
	Orpheus 803	AFJ	7	1	A	5,000 lb.	1.08	4.39	32.4	89.1	835	G. 91, Etendard VI, Taon, Fuji Trainer.
	Orpheus 100	AFJ	7	1	A	4,230 lb.	.964	4.39	32.4	85.0	885	Gnat trainer, G. 91.
	Orpheus 12	AFJ	8	2	A	6,810 lb.	.967	5.7	32.4	95.0	1,110	
	Orpheus 12 SR	AFJ	8	2	A	8,170 lb.	1.62	5.7	32.4	95.0	1,110	Afterburner, basic thrust 6810.
De Havilland Engine Co., Ltd. *Leavesden, Hertsfordshire*	Goblin 35	CFJ	1	1	16	3,500 lb. t.	1.16	3.7	50	110	1,630	DH Vampire Trainer.
	Ghost 103	CFJ	1	1	10	4,950 lb. t.	1.13	4.5	53	129	2,257	DH Venom F. B. Mk. 4.
	Ghost 105	CFJ	1	1	10	5,300 lb. t.	1.13	4.7	53	130	2,135	DH Sea Venom N.F. Mk. 22.
	Gyron D. Gy. 2	AFJ	7	2	A	20,000 lb. t.	1.04	.....	55	156	4,270	
	Gyron Jr. D.G.J. 1	AFJ	.....	.....	.....	7,000 lb. t.	.....	.....	41	91	.....	
	Gyron Jr. D.G.J. 10	AFJ	.....	.....	.....	10,000 lb. t.	.....	.....	40	92	.....	Bristol T188 Supersonic Research aircraft.
	Gnome H. 1000	AFS	10	2, 1	1	1,000 shp.	0.67	8.3	30	61	298	GET58-6 equiv. Westland whirlwind & various copters.
	Gnome P. 1000	AFP	10	2, 1	1	1,000 shp.	0.69	8.3	32	76	555	British design-turboprop version of T58-6.
	Gnome H. 1200	AFS	10	2, 1	A. 1	1,250	.63	8.3	30	61	320	GET58-8 equiv. various copters.
	Gnome P. 1200	AFP	10	2, 1	A. 1	1,150	.65	8.3	32	76	630	Turboprop version of H 1,200.
D. Napier & Son, Ltd. *London*	Eland N. El. 1	AFP	10	3	6	3,060 eshp.	0.64	7	36	122	1,570	
	Eland N. El. 3	AFP/G	10, 9	3	6	3,000 eshp.	0.62	7	36	158	2,435	
	Eland 504	AFP	10	3	6	3,500 eshp.	0.61	7	36	115	1,820	Convair 340/440.
	Eland N. El. 7	AFP/G	10, 9	3	6	3,500 eshp.	0.60	7	36	158	2,575	Uprated N. El. 3.
	Eland E. 211	AFP	10	3	6	3,710 eshp.	0.60	7	36	135	1,418	Uprated E 229A.
	Oryx N. Or. 1	AFG	12, 4	2	5	780 ghp.	0.68	6	19	83	495	
	Oryx N. Or. 4	AFG	12, 4	2	5	865 ghp.	0.65	6	19	83	495	
	Oryx N. Or. 5	AFG	12, 4	2	5	950 ghp.	0.62	6.1	19	83	515	
	Gazelle N. Ga. 1	AFP	11	2+1	6	1,260 shp.	0.71	6.37	34	70	780	
	Gazelle N. Ga. 2	AFP	11	2+1	6	1,650 shp.	0.68	6.37	34	70	830	Bristol 192.
	Gazelle N. Ga. 3	AFP	11	2+1	6	1,800 shp.	0.66	6.37	34	70	865	
	Gazelle N. Ga. 4	AFP	11	2+1	6	2,000 shp.	0.635	6.37	34	70	900	
	Eland E. 229A	AFP	10	3	6	3,440 eshp.	0.62	7	36	135	1,418	Twin unit for Westminster.
	Eland 508	AFP	10	3	6	1,450 shp.	0.61	7	36	115	1,820	Uprated 504.
	Gazelle N. Ga. 13	AFP	11	2+1	6	.....	0.69	5.9:1	34	70	865	Wessex.
Rolls-Royce, Ltd. *Derby*	Avon RA. 7	AFJ	12	2	8	7,500 lb. t.	0.92	6.5	42	112	2,460	
	Avon RA. 7R	AFJ	12	2	8	9,500 lb. t.	1.90	6.5	42	120	2,895	Afterburner.
	Avon RA. 21	AFJ	12	2	8	8,000 lb. t.	0.93	6.5	42	117	2,478	
	Avon RA. 14	AFJ	15	2	A	9,500 lb. t.	0.84	7.8	42	113	2,897	
	Avon RA. 26	AFJ	15	2	A	10,000 lb. t.	0.86	.....	42	113	2,790	
	Avon RA. 28	AFJ	15	2	A	10,000 lb. t.	0.86	.....	42	113	2,890	Modified RA. 28 in Ryan X-13
	Avon RA. 24	AFJ	15	2	A	11,250 lb. t.	.....	.....	.....	.....	.....	
	Avon RA. 24R	AFJ	15	2	A	.....	.....	.....	.....	.....	.....	Afterburner.
	Avon RA. 29	AFJ	16	3	A	10,500 lb. t.	0.775	.....	42	126	3,326	D.H. Comet, Sud Caravelle.
	Conway RCo. 11	BPJ	.....	.....	A	17,250 lb. t.	.....	.....	42	136	.....	
	Conway RCo. 12	BPJ	7+9	1+2	10	17,500 lb. t.	0.725	14.1	42	131	4,504	Boeing 707-420, DC-8.
	Conway RCo. 15	BPJ	7+9	1+2	10	18,500 lb. t.	0.701	14.1	42	131	4,544	DC-8.
	Conway RCo. 42	BPJ	.....	1+2	10	20,250 lb. t.	0.630	.....	.....	.....	5,001	Vickers VC-10.
	R.B. 141	BPJ	.....	.....	10	15,000 lb. t.	.....	.....	39.4	114.5	.....	Caravelle 7.
	R.B. 145	BPJ	.....	.....	.....	2,750 lb. t.	.....	.....	.....	.....	.....	
	R.B. 108	AFJ	.....	.....	A	2,010 lb. t.	.....	.....	.....	.....	.....	VTOL engine; Short S.C. 1.
	R.B. 163	BPJ	.....	.....	.....	10,100 lb. t.	.....	.....	.....	.....	.....	DH 121.
	Dart Mk. 506	CFP	2	2	7	1,540 eshp.	0.727	5.5	38	95	1,030	Viscount 700 & 800.
	Dart Mk. 510	CFP	2	2	7	1,740 eshp.	0.689	5.5	38	98	1,110	
	Dart Mk. 511	CFP	2	2	7	1,720 eshp.	0.698	5.5	38	98	1,195	Fokker/Fairchild F. 27.
	Dart Mk. 520	CFP	2	3	7	1,890 eshp.	0.7	5.8	38	98	1,250	Viscount 806.
	Dart Mk. 525	CFP	2	3	7	1,990 eshp.	0.68	5.8	38	98	1,250	Viscount 810.

Abbreviations:

A — Annular
ACFJ — axial-centrifugal turbojet
ACFP — axial-centrifugal turboprop
AFG — axial-flow gas generator
AFJ — axial-flow turbojet
AFP — axial-flow turboprop
BPJ — bypass turbojet
CFJ — centrifugal-flow turbjoet
CFP — centrifugal-flow turboprop
eshp. — equivalent shaft horsepower
ghp. — gas horsepower
lb. t. — pounds thrust
1 — Lb./hr./lb. thrust
2 — Lb./hp./hr.
3 — Lb./hr.

Manufacturer and Address	Designation	Type	No. of compressor stages	No. of turbine stages	No. of combustors	Max. power @ S. L.	Specific fuel consumption at max. power	Compression ratio at max. rpm.	Maximum envelope diameter, in.	Maximum envelope length, in.	Dry weight, less tailpipe, lb.	Remarks
Rolls-Royce, Ltd. (*Cont'd*) *Derby*	Dart Mk. 526	CFP	2	3	7	2,100 eshp.	0.665	5.8	38	98	1,250	A.W. 650 Freightcoach.
	Dart Mk. 527	CFP	2	3	7	2,100 eshp.	0.665	5.8	38	98	1,260	H.P. Dart Herald.
	Dart Mk. 528	CFP	2	3	7	1,960 eshp.	0.690	5.8	38	98	1,273	Fairchild F. 27.
	Dart Mk. 530	CFJ	2	3	7	2,105 eshp.	0.660	5.8	37.9	98.5	1,250	Viscount 833.
	Dart Mk. 529	CFP	2	3	7	2,100 eshp.	0.665	5.8	38	98	1,269	Grumman Gulfstream.
	Dart Mk. 21	CFP	2	3	7	2,150 eshp.	0.610	5.8	38	98	1,240	1050 Alize.
	Dart. RDa. 10	CFP	2	3	7	2,660 eshp.	0.64	6.25	38	98	1,323	
	Dart Mk. 541	CFP	2	3	7	2,350 eshp.	0.675	6.25	38	98	1,323	Viscount 840.
	Tyne RTy. 1	AFP	6+9	1+3	A	4,985 eshp.	0.499	13.1	41	110	2,220	Vanguard.
	Tyne RTy. 11	AFP	6+9	1+3	A	5,525 eshp.	0.48	13.1	41	110	2,124	Vanguard.
	Tyne RTy. 12	AFP	6+9	1+3	A	5,730 eshp.	0.449	13.1	41	110	2,220	Canadair CL-44.
	Avon RA. 29/3	AFJ	16	3	8	11,700	0.805	.....	42	113.3	3,387	Caravelle 3.
	Avon RA. 29/6	AFJ	17	3	8	12,500	0.762	.....	42	.....	3,491	Caravelle 6.
	Avon RB146	AFJ	.....	.....	8	13,220	.....	.....	.....	.....	.....	Military Engine.
FRANCE												
SNECMA, *Paris*	Atar E3	AFJ	8	1	A	7,715 lb. t.	1.05	4.8	39	162	1,851	
	Atar E4	APJ	8	1	A	8,150 lb. t.	1.06	4.8	39	162	1,851	
	Atar E5	AFJ	8	1	A	8,150 lb. t.	1.06	4.8	39	162	1,851	
	Atar G2, G3	AFJ	8	1	A	9,700 lb. t.	1.85	4.8	40	253	2,720	
	Atar O8	AFJ	9	2	A	9,700 lb. t.	0.98	5.2	40	181	2,180	
	Atar O9	AFJ	9	2	A	13,250 lb. t.	2.07	5.2	42	264	2,760	
	Atar 9C	AFJ	9	2	A	14,100 lb. t.	2.07	5.2	42	264	2,760	
Generale Aeronautique Marcel Dassault *St. Cloud*	M.D. 30 Viper	AFJ	7	1	A	1,630 lb. t.	1.10	3.8	27	66	496	Bristol-Siddeley license.
	M.D. 30R	AFJ	7	1	A	2,205 lb. t.	2.30	3.8	27	132	761	M.D. 30 with afterburner.
	R. 7	AFJ	7	1	A	3,085 lb. t.	1.07	3.8	29	79	748	
Societe Turbomeca *Paris*	Palas	CFJ	1	1	A	352 lb. t.	1.17[1]	3.95	16	47	158	
	Marbore II	CFJ	1	1	A	880 lb. t.	1.08[1]	3.85	25	62	314	
	Marbore VI	CFJ	1	1	A	1,058 lb. t.	1.08[1]	3.84	22	56	322	
	Gourdon	ACFJ	1	1	A	1,410 lb. t.	.99[1]	5.00	22	69	375	
	Gabizo	ACFJ	1	1	A	2,420 lb. t.	1.05[1]	5.20	26	82	585	
	Artouste II	CFP	1	2	A	400 shp.	1.07[2]	3.88	23	57	360	
	Artouste III	ACFP	1	3	A	550 shp.	.65[2]	5.20	21	58	410	
	Astazou	.....	2	3	A	420 shp.	.66[2]	5.81	18	55	297	
	Turmo III B	CFP	2	3	A	812 shp.	.67[2]	5.65	31	65	560	
	Turmo III C	CFP	2	3	A	1,100 shp.	.68[2]	5.50	.....	.....	.....	
	Palouste IV	.....	1	2	A	.....	2.60[3]	3.80	22	47	200	
	Astazou.	ACFP	2	3	A	66 lb. t./469 shp.	.62[2]	5.81	18	57	320	
	Bastan..	ACFP	2	3	A	14.5 lb. t./800 shp.	.65[2]	5.45	22	61	607	
	Palouste VI	.....	1	2	A	.....	3.97[3]	3.7	22	47	.....	
ITALY												
FIAT-SMA *Turin*	4002.001	CFJ	1	1	A	550 lb. t.	1.25	4	22	41	220	

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BPJ — by pass turbojet
CFJ — centrifugal-flow turbjoet
CFP — centrifugal-flow turboprop
eshp. — equivalent shaft horsepower
ghp. — gas horsepower
lb. t. — pounds thrust
[1] — Lb./hr./lb. thrust
[2] — Lb./hp./hr.
[3] — Lb./hr.

ALLEGHENY AIRLINES NAPIER ENGINE CONVAIR 540

U. S. Reciprocating Engines

● SPECIFICATIONS

Manufacturer and Address	Designation	No. of cylinders	Cylinder arrangement	Propeller drive	Power Ratings: Max. takeoff power (hp.)—SL	Power Ratings: At rpm.	Power Ratings: Normal rated power (hp.)	Power Ratings: At rpm.	Power Ratings: At altitude (ft.)	Fuel grade	Diameter or dimensions, in. (without cowling)	Blower ratio	Gross weight dry (lb.)
Aircooled Motors, Inc. *Syracuse, N. Y.*	4A4-100-B3	4	Ho	Direct	100	2,550	.....	.....	.....	80	.....	.....	200
	6A4-150-B3	6	Ho	Direct	150	2,600	.....	.....	.....	80	.....	.....	278
	6A4-165-B3	6	Ho	Direct	165	2,800	.....	.....	.....	80	.....	.....	278
	6AG4-185-B12	6	Ho	G .632:1	185	3,100	.....	.....	.....	80	.....	.....	232
	6A4-200-C6	6	Ho	Direct	200	3,100	.....	.....	.....	91	.....	.....	307
	6V4-200-C32[1], C33[1], O335-5, -6	6	Vo	Direct	200	3,100	.....	.....	.....	91	.....	.....	297
	6V6-245-B 16F[1] O425-1	6	Vo	Direct	245	3,275	.....	.....	.....	80	.....	.....	372
	6V-335-A, -B	6	Vo	Direct	210	3,100	.....	.....	.....	91	.....	.....	295
	6VS-335	6	Ho	Direct	.....	.....	.....	.....	.....	.....	.....	.....	.....
Avco Manufacturing Corp. **Lycoming Division** *Stratford, Conn.*	O-235-C1	4	Ho	Direct	115	2,800	86	2,350	6,500	80	22.53x32	.....	237
	O-290-D2B	4	Ho	Direct	140	2,800	100	2,350	6,500	80/87	22.81x32.24	.....	264
	O-320-A2B	4	Ho	Direct	150	2,700	110	2,450	7,000	80/87	23.12x32.24	.....	272
	O-320-B2B	4	Ho	Direct	160	2,700	120	2,450	7,000	91/96	23.12x32.24	.....	278
	O-340-A1A	4	Ho	Direct	170	2,700	125	2,450	7,000	91/96	24.55x32.55	.....	278
	O-360-A1A	4	Ho	Direct	180	2,700	135	2,450	7,500	91/96	24.72x33.37	.....	285
	O-360-B1A	4	Ho	Direct	180	2,700	125	2,450	7,500	80/87	24.59x33.37	.....	279
	O-360-C2B	4	Ho	Direct	180	2,900	145	2,900	7,500	91/96	19.68x33.37	.....	289
	O-540-F1B5	6	Ho	Direct	260	2,800	235	2,800	4,000	91/96	24.56x33.37	.....	398
	VO-360-A1A	4	Vo	Direct	180	2,900	145	2,900	7,500	91/96	21.92x33.37	.....	298
	VO-435-A1E	6	Vo	Direct	270	3,400	200	3,200	7,000	80/87	34.73x33.58	.....	392
	VO-540-B1B,-B1C	6	Vo	Direct	310	3,300	240	3,200	7,000	80/87	24.57x34.14	.....	430
	GO-435-C2B2-6	6	Ho	Gear	260	3,400	180	2,750	6,000	80/87	28.02x33.12	.....	430
	GO-480-B1A6,-B1D	6	Ho	Gear	270	3,400	195	2,750	7,000	80/87	28.02x33.12	.....	432
	GO-480-G1A6	6	Ho	Gear	295	3,400	210	2,750	7,000	100/130	28.02x33.12	.....	439
	GO-480-G1B6	6	Ho	Gear	295	3,400	210	2,750	7,000	100/130	27.46x33.12	.....	464
	GO-480-G2D6	6	Ho	Gear	295	3,400	210	2,750	6,500	100/130	28.02x33.12	.....	442
	GSO-480-B1A6	6	Ho	Gear	340	3,400	240	2,750	10,000	100/130	33.08x33.12	.....	498
	GSO-480-B1B6 (O-480-1)	6	Ho	Gear	340	3,400	240	2,750	10,000	100/130	33.26x33.12	.....	500
	GSO-480-B1C6	6	Ho	Gear	340	3,400	240	2,750	10,000	100/130	22.56x33.12	.....	497
	GSO-480-B2D6	6	Ho	Gear	340	3,400	240	2,750	10,000	100/130	22.56x33.12	.....	498
	O-540-A1B5, A1C5	6	Ho	Direct	265	2,800	190	2,350	6,000	91/96	25.81x33.37	.....	397
	SO-580-A1B (O-580-3)	8	Ho	Direct	400	3,300	280	3,000	11,000	100/130	24.58x33.12	.....	578
	1GSO-480-A1A6	6	Ho	Gear	340	3,400	240	2,750	13,500	100/130	23.29x33.12	.....	496
	1MO-360-A1A	4	Ho	Direct	180	2,700	135	2,450	7,500	91/96	17.47x33.37	.....	251
Continental Motors Corp. *Muskegon, Mich.*	O-200-A	4	Ho	Direct	100	2,750	.....	.....	.....	80/87	.....	.....	190
	GO-300-A, B & C	6	Ho	G .750:1	175	3,200	.....	.....	.....	80/87	.....	.....	314
	IO-470-C	6	Ho	Direct	250	2,600	.....	.....	.....	80/87	.....	.....	432
	IO-470-D, E & F	6	Ho	Direct	260	2,625	.....	.....	.....	100/130	.....	.....	426
	A65-8	4	Ho	Direct	65	2,300	.....	.....	.....	80/87	.....	.....	170
	C85-12F	4	Ho	Direct	85	2,575	.....	.....	.....	80/87	.....	.....	184
	C90-12F	4	Ho	Direct	95	2,625	.....	.....	.....	80/87	.....	.....	188
	O-300-A, B & C	6	Ho	Direct	145	2,700	.....	.....	.....	80/87	.....	.....	268
	O-470-G	6	Ho	Direct	240	2,600	.....	.....	.....	91/96	.....	.....	432
	O-470-H	6	Ho	Direct	240	2,600	.....	.....	.....	91/96	.....	.....	472
	O-470-J	6	Ho	Direct	225	2,550	.....	.....	.....	80/87	.....	.....	378
	O-470-K	6	Ho	Direct	230	2,600	.....	.....	.....	80/87	.....	.....	404
	O-470-L	6	Ho	Direct	230	2,600	.....	.....	.....	80/87	.....	.....	404
	O-470-M	6	Ho	Direct	240	2,600	.....	.....	.....	91/96	.....	.....	410
	FSO-526-A	6	Ho	Direct	270	3,200	270	3,000	7,900	91/96	.....	10.04	553
	GSO-526-A	6	Ho	G .688:1	340	3,100	300	3,000	14,500	100/130	.....	12.88	556
	O-470-4	6	Ho	Direct	225	2,600	.....	.....	.....	91/96	.....	.....	415
	O-470-15	6	Ho	Direct	213	2,600	.....	.....	.....	80/87	.....	.....	405
	E-185-9	6	Ho	Direct	205	2,600	.....	.....	.....	80/87	.....	.....	352
	E-225-4	6	Ho	Direct	225	2,650	.....	.....	.....	80/87	.....	.....	355
Pratt & Whitney Aircraft Div. **United Aircraft Corp.** *East Hartford, Conn.*	R2000-D5	14	Rad	G .500	1,450	2,700	1,200	2,550	6,400	100/130	49.10	7.15	1,585
	R2000 2SD13-G	14	Rad	G .500	1,450	2,700	1,200	2,550	5,000	100/130	49.10	7.15 49.52	1,605
	R2800-CB3	18	Rad	G .450:1	2,400	2,800	1,800	2,600	8,500	100/130	52.80	7.29	2,357
	R2800-CB4	18	Rad	G .450:1	2,500	2,800	1,800	2,600	8,500	108/135	52.80	7.29	2,357
	R2800-CB16	18	Rad	G .450:1	2,400	2,800	1,800	2,600	8,500	100/130	52.80	7.29+8.58	2,390
	R2800-CB17	18	Rad	G .450:1	2,500	2,800	1,800	2,600	8,500	108/135	52.80	7.29+8.58	2,390
	R2800-CB2	18	Rad	G .450:1	2,500	2,800	1,900	2,600	7,000	115/145	52.8	7.29	2,370
	R2800-CB5, -54	18	Rad	Direct	2,100	2,700	1,900	2,600	7,000	115/145	52.8	7.29	2,330
	R2800-CB15, -99W	18	Rad	G .450:1	2,500	2,800	1,900	2,600	7,000	115/145	52.8	7.29+8.58	2,403
Wright Aeronautical Div. **Curtiss-Wright Corp.** *Wood-Ridge, N. J.*	749C18BD1 R3350-75	18	Rad	G .4375:1	2,250	2,800	2,100	2,400	4,400	100/130	55.92	6.46[4]	2,915
	826C9HD345 R1820-76A-76B	9	Rad	G .666:1	1,425	2,700	1,275	2,500	3,000	100/130	55.27	7.21[2]	1,380
	836C18CA2 R3850-26WB	18	Rad	G .4375:1	2,700	2,900	2,300	2,600	6,200	115/145	55.6	6.46[4]	2,953
	853C7BA1 R1300-1A	7	Rad	G .5625:1	800	2,600	700	2,400	5,000	91/98	50.45	7.21	1,065
	856TC18DB1, 2, 3	18	Rad	G .4375:1	3,500	2,900	2,600	2,600	6,600	115/145	56.6	6.46[4]	3,520
	863C9HD1 R1820-103	9	Rad	Direct	1,425	2,700	1,275	2,500	3,000	100/130	54.95	7.21[2]	1,380
	865C7BA1 R1300-2B	7	Rad	Direct	800	2,600	700	2,400	5,000	91/98	50.45	7.21	1,067
	867C9HE1, 2 R1820-82-82A	9	Rad	G .5625:1	1,525	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,469
	871C7BA1 R1300-3	7	Rad	Direct	800	2,600	700	2,400	5,000	91/98	50.45	7.21	1,080
	872TC18DA1 R3350-34	18	Rad	G .4375:1	3,250	2,900	2,600	2,600	6,500	115/145	56.6	6.46[4]	3,641
	878TC18EA1, 2 R3350-32W-32WA	18	Rad	G .4375:1	3,700	2,900	2,800	2,600	4,100	115/145	56.6	6.46[4]	3,560
	895C9HE1, 2, 3 R1820-84, 84A, 84B	9	Rad	Direct	1,525	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,419
	896C9HD1 R1820-86	9	Rad	G .666:1	1,425	2,700	1,275	2,500	3,100	100/130	55.27	7.21[2]	1,385
	923TC18DA1 R3350-91	18	Rad	G .4375:1	3,250	2,900	2,600	2,600	6,500	115/145	56.6	6.46[4]	3,782
	932TC18EA1 R3350-38	18	Rad	G .355:1	3,400	2,900	2,860	2,650	4,860	115/145	56.6	6.46[4]	3,782
	957C7BA1	7	Rad	G .5625:1	800	2,600	700	2,400	7,300	91/98	50.45	7.21	1,065
	968C9HE1,2	9	Rad	G .5625:1	1,475	2,800	1,275	2,500	3,500	100/130	54.95	7.21	1,390
	972TC18DA1, 2	18	Rad	G .4375:1	3,250	2,900	2,600	2,600	6,500	115/145	56.6	6.46[4]	3,581
	975C18CB1	18	Rad	G .4375:1	2,800	2,900	2,400	2,600	4,300	115/145	56.6	6.46[4]	3,065
	977C9HD1, 2, 3	9	Rad	Direct	1,425	2,700	1,275	2,500	2,600	100/130	55.75	7.21[3]	1,349
	982C9HE1	9	Rad	G .5625:1	1,525	2,800	1,275	2,500	3,400	115/145	55.75	7.21[2]	1,455
	988TC18EA1	9	Rad	G .666:1	1,425	2,700	1,275	2,500	3,300	100/130	54.95	6.46[4]	1,371
	988TC18EA2	18	Rad	G .4375:1	3,400	2,900	2,800	2,600	4,700	115/145	56.59	6.46[4]	3,645
	989C9HE12[1]	18	Rad	G .355:1	3,400	2,900	2,800	2,600	4,700	115/145	56.59	7.21	3,745
	941C9HE1 R1820-82WA	9	Rad	Direct	1,525	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,398
	918C9HE1 R1820-88	9	Rad	G .5625:1	1,625	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,484
	R1820-90-90A	9	Rad	G .355:1	1,525	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,620
	981TC18EA1 R3350-42	9	Rad	Direct	1,525	2,800	1,275	2,500	3,500	115/145	55.74	7.21	1,422
	981TC18EA1	18	Rad	G .4375:1	3,400	2,900	2,600	2,600	6,500	115/145	56.59	.....	3,730
	990C7BA1	18	Rad	G .4375:1	3,700	2,900	2,800	2,600	4,700	115/145	56.59	.....	3,651
	998C9HE1, 2	7	Rad	Direct	800	2,600	700	2,400	7,300	91/98	50.45	7.21	1,070
		9	Rad	Direct	1,525	2,800	1,275	2,500	3,500	115/145	55.75	7.21	1,401

G —Geared Ho —Horizontally opposed. Rad —Radial. SL —Sea level. Vo —Vertically opposed. [1] For helicopter installation.

U. S. Personal and Business Aircraft

● SPECIFICATIONS

Manufacturer and Address	Designation	No. of seats	Over-all span	Over-all length	Max. height, 3-pt.	Gross wing area, sq. ft.	Weight empty, lb.	Normal gross wt., lb.	Number, make, model and max. rating, ea.	Normal fuel capacity, gal.	Max. speed, mph.	Landing speed, mph.	FAA field length (takeoff), ft.	FAA field length (landing), ft.	Max. range, mi.	Price, FAF, $
		Basic Data							Powerplants	Performance						
Aero Design & Engr'g. Co. *Bethany, Okla.*	Aero Commander 500	7	49′	35′ 4″	14′ 6″	255	3,850	6,000	2 Lyc. O540-A1A @ 250 hp.	156	218	70	1,450	1,350	1,100	64,750
	Aero Commander 560E	7	49′	35′ 4″	14′ 6″	255	4,300	6,500	2 Lyc. GO480-C1B6 @ 295 hp.	233	270	70	2,040	1,485	1,600	78,400
	Aero Commander 680E	7	49′	35′ 4″	14′ 6″	255	4,475	7,500	2 Lyc. GSO480-B1A6 @ 340 hp	223	255	70	1,500	1,605	1,400	94,500
	720 Alti-Cruiser	6	49′	35′ 4″	14′ 6″	255	5,230	7,500	2 Lyc. GSO480-B1A6 @ 340 hp.	223	270	70	1,500	1,605	1,450	183,750
Aircraft Marine Engr'g. Corp. *Van Nuys, Calif.*	A-1 Anser	9	46′	39′	11′	260	4,100	9,000	2 Con. 420-M @ 1,200 lb. t.	480	460	43	650	650	1,650	190,000
	A-2 Avocet	26	72′	60′	19′	650	10,250	24,000	4 Con. 420-M @ 1,500 lb. t.	1,600	450	48	2,000	1,500	2,600	500,000
Bee Aviation Assoc., Inc. *San Diego, Calif.*	Queen Bee	4	32′	21′ 10″	7′ 7″	130	1,250	2,300	1 Lyc. A360 @ 150 hp.	42	160	55	950	700	650	
	Honey Bee	1	28′	16′ 10″	7′ 8″	96	610	860	1 Con. A65 @ 65 hp.	8.5	120	45	700	.....	240	.....
Beech Aircraft Corp. *Wichita, Kansas*	Super 18 (G18S)	8	49.6′	35.1′	9.6′	360.7	5,950	9,700	2 P&W R985-AN14B @ 450 hp.	318	233	84	1,980	1,850	1,585	126,000
	Queen Air (65)	7	45.8′	33.3′	14.1′	277.06	4,740	7,700	2 Lyc. IGSO-480-A1A6 @ 340 hp.	230	239	80	1,560	1,685	1,445	120,000
	Twin Bonanza (H50)	6	45.25′	31.5′	11.3′	277.06	4,480	7,300	2 Lyc. IGSO-480-A1A6 @ 340 hp.	230	235	82.5	1,450	1,840	1,650	95,500
	Twin Bonanza (D50C)	6	45.25′	31.5′	11.3′	277.06	4,100	6,300	2 Lyc. GO-480-G2D6 @ 295 hp.	180	214	71	1,260	1,455	1,650	83,000
	Travel Air (B95)	4	37.8′	25.3′	9.5′	199.2	2,635	4,100	2 Lyc. O-360-A1A @ 180 hp.	112	210	70	1,280	1,590	1,410	51,500
	Bonanza (M35)	4	33.5′	25.1′	6.5′	181	1,832	2,950	1 Con. IO-470-C @ 250 hp.	68	210	59	670	400	1,245	25,300
	Debonair (33)	4	32.8′	25.5′	8.25′	177.6	1,730	2,900	1 Con. IO-470-J @ 225 hp.	68	195	60	900	570	1,170	19,995
Call Air, Inc. *Afton, Wyo.*	A-5	2	35′ 5″	23′ 9″	7′ 10″	186	1,020	2,150	1 Lyc. O320-A2A @ 150 hp.	25	104	43	620	450	325	.....
	A-6	2	35′ 5″	24′	7′ 10″	186	1,170	2,350	1 Lyc. O360-A1A @ 180 hp.	40	107	46	750	450	.....	.....
Cessna Aircraft Co. *Wichita, Kansas*	150	2	33′ 4″	21′ 11″	6′ 11″	160	946	1,500	1 Con. O200-A @ 100 hp.	26	124	50	1,205	1,055	630	7,250
	172	4	36′	26′ 4″	8′ 11″	174	1,252	2,200	1 Con. O-300-C @ 145 hp.	42	140	52	1,370	1,115	790	9,450
	175	4	36′	26′ 6″	9′ 6″	174	1,339	2,350	1 Con. GO-300-C @ 175 hp.	52	147	51	1,340	1,155	755	11,600
	180	4	36′	26′	7′ 6″	174	1,530	2,650	1 Con. O-470-L @ 230 hp.	65	170	56	1,080	1,330	845	14,675
	182	4	36′	27′ 1″	9′ 9″	175	1,550	2,650	1 Con. O-470-L @ 230 hp.	65	167	56	1,080	1,310	835	14,890
	Skylane	4	36′	27′ 1″	9′ 9″	175	1,632	2,650	1 Con. O-470-L @ 230 hp.	65	170	56	1,080	1,310	845	17,325
	310D	5	35′ 9″	29′ 7″	9′ 11″	175	3,037	4,830	2 Con. IO-470-D @ 260 hp.	102	245	74	1,395	1,720	1,440	59,950
	Skylark	4	36′	26′ 6″	9′ 6″	174	1,420	2,350	1 Con. GO-300-C @ 175 hp.	52	149	51	1,340	1,155	760	13,050
	210	4	36′ 6″	27′ 9″	8′ 8½″	175.5	1,735	2,900	1 Con. IO-470-E @ 260 hp.	65	199	59	1,135	1,190	1,100	22,450
Champion Aircraft, Inc. *Osceola, Wisc.*	7EC Traveler	2	33′ 2″	21′ 8″	5′ 2″	170	800	1,450	1 Con. C90-12F @ 95 hp.	29	115	38	500	350	500	6,320
	7FC Tri-Traveler	2	33′ 2″	21′ 8″	7′ 2″	170	930	1,450	1 Con. C90-12F @ 95 hp.	29	115	44	500	350	500	6,995
	7GC Sky-Trac	2	33′	21′ 11″	6′ 2″	170	930	1,650	1 Lyc. O290-D2B @ 140 hp.	39	135	40	300	350	660	7,520
	7HC DX'er	3	33′	21′ 11″	7′	164	1,000	1,650	1 Lyc. O290-D2B @ 140 hp.	39	135	45	350	350	650	8,120
Downer Aircraft Ind., Inc. *Alexandria, Minn.*	Bellanca 260 (Model 14-19-3)	4	34′ 2″	22′ 11″	6′ 4″	161.5	1,690	2,700	1 Con. IO-470-F @ 260 hp.	40	208	49	390	460	880	18,990
Fletcher Aviation Corp. *Rosemead, Calif.*	FU-24 Utility	5	42′	31′ 10″	9′ 4″	294	1,890	3,500	1 Con. O470-N @ 240 hp.	44	130	48	.....	.....	410	24,290
Forney Aircraft *Fort Collins, Colo.*	Fornaire F-1 (Executa, Expediter)	2	30′	20′ 2″	6′ 3″	143	920	1.450	1 Con. C90-12F @ 95 hp.	24	130	56	500	600	500	.....
Grumman Aircraft Engr'g Corp. *Bethpage, N. Y.*	159 Gulfstream	14	78′ 6″	64′	22′ 9″	615	20,134	32,500	2 Rolls-Royce RDa. 7/2 @ 2,105 eshp.	1,304	350	94	3,860	1,900	2,050	.....
	164 Crop Duster	1	35′ 8″	24′ 4″	10′ 9″	326	2,179	3,600	1 Con. W670 @ 220 hp.	34	110	....	.....	.....	.....	18,500
Helio Aircraft Corp. *Norwood, Mass.*	H395A Courier	5	39′	30′	8′ 10″	231	2,020	3,000	1 Lyc. GO435-C2B2 @ 260 hp.	60	189	30	495	495	750	31,980
	H395 Super Courier	5	39′	30′	8′ 10″	231	2,037	3,000	1 Lyc. GO480-G1D6 @ 295 hp.	60	189	30	475	475	842	34,980
Lake Aircraft Corp. *Sanford, Me.*	C-2 Skimmer	4	34′	23′ 6″	9′	156	1,500	2,350	1 Lyc. O360 @ 180 hp.	40	140	52	.....	.....	500	24,895
Lockheed Aircraft Corp. *Marietta, Ga.*	1329 Jet Star	10	53′ 8″	60′ 5″	20′ 6″	543	18,450	38,930	4 P&W JT12A-6 @ 3,000 lb. t.	2,630	575	120	6,820	4,995	2,810	1,000,000
McDonnell Aircraft Corp. *St. Louis, Mo.*	Model 119	12	57′ 7″	66′ 6″	23′ 8″	550	.....	40,928	4 P&W JT-12 @ 3,000 lb. t.	.....	565	108	.....	.....	2,335	.....
Myers Aircraft Co. *Tecumseh, Mich.*	Meyers 200A	4	30′ 6″	24′ 5″	8′ 6″	161	1,910	3,000	1 Con. IO-470-D @ 260 hp.	40	....	....	.....	.....	.....	.....
Mooney Aircraft, Inc. *Kerrville, Tex.*	Mark 20-A	4	35′	23′	8′ 5″	167	1,450	2,450	1 Lyc. O360 @ 180 hp.	49	195	57	.....	.....	1,000	15,450
Piper Aircraft Corp. *Lock Haven, Pa.*	PA-18 "95"	2	35′ 3″	22′ 4″	6′ 7″	178.5	800	1,500	1 Con. C90 @ 90 hp.	18	112	42	750	800	360	6,145
	PA-18 "150"	2	35′ 3″	22′ 5″	6′ 7″	178.5	930	1,750	1 Lyc. O320 @ 150 hp.	36	130	43	500	725	460	7,795
	PA-18-A Super Cub	1	35′ 3″	22′ 5″	6′ 7″	178.5	1,060	2,070	1 Lyc. O320 @ 150 hp.	36	105	45	950	875	360	8,045
	PA-22 Caribbean	4	29′ 3″	20′ 6″	8′ 4″	147.5	1,100	2.000	1 Lyc. O320 @ 150 hp.	36	139	49	1,220	500	500+	8,795
	PA-22 "160" Tri-Pacer	4	29′ 3″	20′ 7″	8′ 4″	147.5	1,110	2,000	1 Lyc. O320-B @ 160 hp.	36	141	49	900	.....	536	9,345
	PA-23 "160" Apache	3-5	37′	27′ 2″	9′ 6″	204	2,230	3,500	2 Lyc. O320-B @ 160 hp.	72	183	59	900	670	853	36,990
	PA-24 "180" Comanche	4	36′	24′ 8″	7′ 4″	178	1,475	2,550	1 Lyc. O360-A1A @ 180 hp.	50	167	58	750	600	920	15,800
	PA-24 "250" Comanche	4	36′	24′ 11″	7′ 4″	178	1,600	2,800	1 Lyc. O540-A1A @ 250 hp.	60	190	64	750	650	1,100	19,800
	PA-25 Pawnee	1	36′ 2″	24′	6′ 8″	183	1,200	2,300	1 Lyc. O320 @ 150 hp.	40	100	57	625	400	400	9,000
	PA-23 "250" Aztec	5	37′	27.6′	10′ 3″	207	2,775	4,800	2 Lyc. O540 @ 250 hp.	144	215	62	750	900	1,400	49,500
Stits Aircraft *Riverside, Calif.*	SA9A Skycoupe	2	28′ 4″	17′ 6″	.....	125	900	1,450	1 Con. A200. A @ 100 hp.	24	145	60	400	500	500	4,500
Taylorcraft, Inc. *Conway, Pa.*	Zephyr	4	34′ 8″	24′ 4″	7′ 2″	179	1,700	2,750	1 Con. O470-J @ 225 hp.	66	160	65	450	700	750	.....
	Topper	1	34′ 8″	24′ 4″	7′ 2″	179	1,635	2,750	1 Con. O470-J @ 225 hp.	46	115	70	900	900	400	.....
Transland Aircraft *Torrence, Calif.*	AG-2	1	42′	28′ 5″	9′ 8″	321	3,382	6,000	1 P&W R1340 @ 600 hp.	125	144	51	900	600	.....	.....
Trecker Aircraft Corp. *Milwaukee, Wisc.*	Trecker 166	8	46′ 9″	38′ 1″	16′ 5″	286	5,104	8,100	2 Lyc. GSO-480-B1C6 @ 340 hp.	232.5	226	68	1,550	1,312	1,155	105,250
	Gull Amphibian (L-1)	5	44′ 5″	35′ 5″	12′ 7″	270	4,420	6,000	2 Lyc. GO-480-B1 @ 270 hp.	190	184	72	1,380	1,410	990	74,500
	Gull Amphibian (L-2)	5	44′ 5″	35′ 5″	12′ 7″	270	4,680	6,615	2 Lyc. GSO-480-A1A6 @ 340 hp.	190	213	72	1,440	1,800	994	89,500

U.S. Civil and Military Transports

Manufacturer and Address	Model	Name	No. of crew	No. of passengers	Cargo capacity, lb.	Number, make, model of powerplants	Maximum speed, mph.	Best cruise speed, mph.	Landing speed, flaps and landing gear down, mph.	Engine-out en route climb, fpm.	FAA field length takeoff, ft.	FAA field length landing, ft.	Maximum still-air range, mi.	Weight empty, lb.	Maximum gross weight, lb.	Maximum landing weight, lb.	Wingspan	Overall length	Maximum height
Boeing Airplane Co. *Renton, Wash.*	707	Jet Stratoliner[1]	3	.....	.....	4 P&W JT3C-6[2]	610	600	....	.....	.....	.....	4,000	111,082	190,000	175,000	130′	128′	38′ 3″
	707-120	Jet Stratoliner	4	100–179	19,200	4 P&W JT3C-6[2]	610	589	....	.....	.....	.....	4,000	113,640	258,000	185,000	130′ 10″	144′ 6″	38′ 8″
	707-220	Jet Stratoliner	4	100–179	19,200	4 P&W JT4A-3[3]	630	615	....	.....	.....	.....	4,000	117,400	248,000	175,000	130′ 10″	144′ 6″	38′ 8″
	707-320	Intercontinental	4–5	108–189	28,200	4 P&W JT4A-11[3]	630	610	....	.....	.....	.....	5,000	132,924	316,000	207,000	142′ 5″	152′ 11″	38′ 8″
	707-420	Intercontinental	4–5	108–189	28,200	4 R-R Co. 15[3]	630	606	....	.....	.....	.....	5,000	131,244	316,000	207,000	142′ 5″	152′ 11″	38′ 8″
	720	.....	4	88–149	16,680	4 P&W JT3C-7[3]	649	614	....	.....	.....	.....	3,300	104,763	203,000	175,000	130′ 10″	136′ 2″	38′ 2″
	KC-135A	Stratotanker	4	80+	50,000	4 P&W J57	600+	...	....	.....	.....	.....	.....	.....	250,000	.....	130′ 10″	136′ 3″	38′ 5″
	VC-137A[4]	.....	...	.....	.....	.....	.....	...	....	.....	.....	.....	.....	.....	.....	.....	130′ 10″	144′ 6″	38′ 8″
	707-120B	Jet Stratoliner	3–4	100–179	19,200	4 P&W JT3D-1	.....	...	....	.....	.....	.....	.....	120,734	258,000	185,000	.....	144′ 6″	38′ 2″
	720B	Jet Stratoliner	3–4	88–165	17,080	4 P&W JT3D-1	.....	...	....	.....	.....	.....	.....	110,778	230,000	175,000	.....	136′ 2″	38′ 2″
	735	.....	3–4	.....	104,000	4 P&W JT3D	.....	...	....	.....	.....	.....	.....	.....	316,000	.....	.....	152′ 11″	38′ 8″
Convair Division General Dynamics Corp. *San Diego, Calif.*	880	.....	3	88–110	8,630	4 GE CJ805-3	615	...	138	.....	6,220	5,460	3,090	81,800	184,500	132,800	120′	129′ 4″	36′
	600	.....	3	96–121	9,280	4 GE CJ805-23	635	...	125	.....	5,790	4,770	4,400	113,300	239,000	180,000	120′	139′ 6″	39′ 6″
	440	Metropolitan	3	44–52	5,400	2 P&W R-2800-CB-17	310	289	85	150	5,000	4,010	2,752	31,305	49,100	47,650	105′ 4″	79′ 2″	28′ 2″
	C-131A	Samaritan	3	.....	.....	2 P&W R-2800-99W	312	...	....	.....	.....	.....	.....	29,000	43,575	.....	91′ 9″	74′ 8″	27′ 3″
	C-131B	.....	...	.....	.....	2 P&W R-2800-99W	295	...	....	.....	.....	.....	.....	29,248	47,000	.....	105′ 4″	79′ 2″	28′ 2″
	YC-131C	.....	...	.....	.....	2 All. YT56-A-3	366	...	....	.....	.....	.....	.....	.....	47,000	.....	105′ 4″	79′ 2″	28′ 2″
	C-131D	.....	3	.....	.....	2 P&W R2800-CB-16	314	...	....	.....	.....	.....	.....	29,600	46,500	.....	105′ 4″	79′ 2″	28′ 2″
	R3Y-2	Tradewind	6	.....	.....	4 All. T40-A 10	350	...	....	.....	.....	.....	.....	31,735	160,000	.....	145′ 9″	139′ 8″	51′ 5″
	R4Y 1	.....	3	.....	.....	2 P&W R 2800-52W	.....	...	....	.....	.....	.....	.....	30,684	47,000	.....	105′ 4″	79′ 2″	28′ 2″
Douglas Aircraft Co., Inc. *Long Beach, Calif.*	DC-8	Series 10	3	116–176	20,850	4 P&W JT3C-6	.....	555	148	.....	9,330	6,400	4,120	120,999	273,000	193,000	142′ 4″	150′ 6″	42′ 4″
	DC-8	Series 20	3	116–176	20,850	4 P&W JT4A-3	.....	588	148	.....	8,200	6,400	4,280	123,757	276,000	193,000	142′ 4″	150′ 6″	42′ 4″
	DC-8	Series 30	3–5	116–176	20,850	4 P&W JT4A-3	.....	588	150	.....	10800	6,590	5,300	126,072	310,000	199,500	142′ 4″	150′ 6″	42′ 4″
	DC-8	Series 40	3–5	116–176	20,850	4 RR R. Co. 12	.....	593	....	.....	9,870	6,590	5,430	124,369	.....	.....	142′ 4″	150′ 6″	42′ 4″
	DC-8	Series 50	3–5	116–176	20,850	4 P&W JT30-3	.....	585	150	.....	9,750	6,590	5,930	124,529	310,000	199,500	142′ 4″	150′ 6″	42′ 4″
	DC-8	Intercontinental	3–5	116–176	.....	4 RR Conway R. Co. 10	.....	591	....	.....	.....	.....	.....	128,000	287,500	.....	139′ 9″	150′ 6″	42′ 4″
	DC-9[10]																		
	DC-7C[5]	Seven Seas	3–5	69–99	18,440	4 Wr. 988TC18EA4	406	371	....	507	5,590	5,360	6,010	72,643	143,000	109,000	127′ 6″	112′ 3″	31′ 10″
	DC-7B[5]	Extended range	3	69–99	17,730	4 Wr. 972TC18DA4	412	360	....	525	6,350	5,870	5,120	68,073	126,000	102,000	117′ 6″	108′ 11″	28′ 7″
	DC-7[5]	Domestic	3	69–99	12,740	4 Wr. 972TC18DA4	409	367	....	448	6,060	5,840	4,430	64,480	122,000	97,000	117′ 6″	108′ 11″	28′ 7″
	DC-6C[5]	Extended range	7	89	11,930	4 P&W R2800-CB-17	370	315	97	493	6,100	5,160	5,000	58,340	107,000	88,200	117′ 6″	106′ 6″	28′ 8″
	DC-6B[5]	Domestic	5	54	16,780	4 P&W R2800-CB-16	370	315	95	460	5,680	4,995	3,720	55,357	100,000	85,000	117′ 6″	106′ 6″	28′ 8″
	DC-6A[5]	Liftmaster	3–5	Cargo	30,500	4 P&W R2800-CB-17	370	315	97	493	6,100	5,160	5,000	51,316	107,000	88,200	117′ 6″	106′ 6″	28′ 8″
	C-124C	Globemaster 2	5–8	Cargo	.....	4 P&W R4360-63A	304	...	....	.....	.....	.....	.....	101,165	185,000	.....	174′ 2″	130′	48′ 4″
	C-133A	Cargomaster 1	4–7	Cargo	62,800	4 P&W T34	.....	...	....	.....	.....	.....	3,975	.....	282,000	282,000	179′ 8″	157′ 6″	48′ 4″
	C-133B	Cargomaster 2	4–7	Cargo	77,680	4 P&W T34-P-9W	312	...	....	.....	.....	.....	.....	120,363	300,000	286,000	179′ 8″	157′ 6″	48′ 4″
Fairchild Aircraft Division Fairchild Engine & Aircraft Corp. *Hagerstown, Md.*	F27	.....	3	40	10,030	2 R-R R Da. 6/mk 511	272	272	79	345	4,500	3,345	2,128	23,970	37,500	36,000	95′ 2″	77′ 1½″	27′ 6″
	F27A	.....	3	40	9,667	2 R-R R Da. 7/mk 528	300	300	79	450	3,420	3,345	1,955	24,520	37,500	36,000	95′ 2″	77′ 1½″	27′ 6″
Grumman Aircraft Engr. Corp. *Bethpage, L. I., N. Y.*	TF-1	Trader	2	9	3,500	2 Wr. R1820-82	.....	...	....	.....	.....	.....	.....	16,858	24,649	.....	69′ 8″	42′	16′ 3″
Lockheed Aircraft Corp. Marietta (Ga.) Division	1329	Jetstar	2	8	2,440	4 P&W JT12A-6	575	550	120	2,200	6,820	4,995	2,810	18,450	38,930	28,000	53′ 8″	60′ 5″	20′ 6″
	GL-329-21	Jetstar	5	.....	.....	4 P&W J-60-P-3	590	550	100	2,200	6,820	4,995	2,810	18,500	41,381	30,000	53′ 8″	60′ 5″	20′ 6″
	C-130A	Hercules	4	92	36,000	4 All. T56-A-1A or T56-A-9	375	350	112	.....	.....	.....	2,115	59,300	124,200	124,200	132′ 7″	97′ 9″	38′ 4″
	GC-130A[6]	Hercules	6	.....	.....	4 All. T56-A-9	375	335	90	1,500	.....	.....	575[7]	62,400	124,200	124,200	132′ 7″	97′ 9″	38′ 4″
	RC-130A[8]	Hercules	8	24	.....	4 All. T56-A-9	375	350	112	1,450	.....	.....	2,115	63,400	124,200	124,200	132′ 7″	97′ 9″	38′ 4″
	C-130B	Hercules	4	92	38,000	4 All. T56-A-7	385	360	116	.....	.....	.....	2,160	67,300	135,000	135,000	132′ 7″	97′ 9″	38′ 4″
	SC-130B[9]	Hercules	8	44	38,000	4 All. T56-A-7	385	360	116	.....	.....	.....	2,160	67,200	135,000	135,000	132′ 7″	97′ 9″	38′ 4″
	CV-1	Hercules	5	92	50,000	4 All. T56-A-7	375	350	112	.....	.....	.....	2,080	72,800	135,000	135,000	132′ 7″	97′ 9″	38′ 4″
	C-130D	Hercules	4	92	30,600	4 All. T56-A-1A or T-56-A-9	360	335	112	.....	.....	.....	1,900	65,700	124,200	124,200	132′ 7″	97′ 9″	39′ 1″
	C-130BL	Hercules	4	92	31,600	4 All. T56-A-7	370	345	116	.....	.....	.....	2,100	73,300	135,000	135,000	132′ 7″	97′ 9″	39′ 1″
Burbank, Calif. Div.		188 Electra	3-4	66-98		4 All. 501-D-13	450	406	130	730	5,250	4,960	3,400	55,993	116,000	95,650	99′	104′ 6″	33′

[1] Prototype.
[2] Wet engine.
[3] Dry engine.
[4] Three aircraft ordered for USAF Special Mission Squadron.
[5] DC-6/DC-7 series production discontinued in 1958 after total of 1,041 of all models built.
[6] Drone launcher.
[7] Combat radius, includes four-hours loiter.
[8] Photographic survey missions.
[9] U. S. Coast Guard search and rescue version.
[10] Design study dropped when Caravelle licensed.

BOEING 707-720 DELIVERY LINE

U. S. STOL & VTOL Aircraft

General Data				Dimensions				Weights		Powerplant					Remarks
Manufacturer and Address	Designation	Type	No. of seats	Span	Length	Height	Wing area, sq. ft.	Empty weight, lb.	Gross weight, lb.	Number, make, model and max. power, ea.	Rotor-propeller diameter	No. of propellers	Service ceiling, ft.	Maximum speed, m.p.h.	
Curtiss-Wright Corp. *Santa Barbara, Calif*	VZ-7AP	Ducted fan	2	15′ 5″[1]	18′ 2″	7′ 7″	133′	1,800	2,540	1 Con. Artouste II-B 400 hp.	6′ 6″	.....	.....	.....	Flight demo. with 57mm. recoilless rifle.
Bell Aircraft Corp. *Buffalo, N. Y.*	X-14	Deflected jet	1	34′	27′	9′	.....	.....	.....	2 AS Viper	N.A.	None	.....	.....	VTOL flight cycle May 24, 1958.
	D-188A	Tilt jets	1	.....	.....	.....	.....	.....	.....	8 GE J85 @ 2,000 lb. t.	N.A.	None	.....	M2+	Twin jets at each wingtip; 2 in fuselage; 2 in tail.
	.....	Ducted Fan	..	.....	.....	.....	.....	.....	.....	.....	N.A.	.....	.....	.....	
Bell Helicopter Corp. *Fort Worth, Tex.*	XV-3	Tilt rotor	4	30′	30′	13′ 6″	120′	3,490	4,700	1 P&W R985@400 hp.	23′	2	7,400[2]	184	Rotor diameter (2) 23 ft.
Bensen Aircraft Corp. *Raleigh, N. C.*	B-10	Prop-Copter	1	7′ 2″[1]	12′	4′ 6″	.....	350	650	2 McCulloch 4318-E 72 hp.	4′ 3″	2	.....	60	First flight Aug. 6, '58.
	B-8m	Gyrocopter	1	21′	21′	6′ 4″	.....	250	500	1 McCulloch 4318E 72 hp.	21′	.....	16,500	85	
Chrysler Corp. Defense Ops. Div. *Detroit, Mich.*	VZ-6	Ducted fan	1	10′[1]	23′	4′ 6″	.....	.....	2,000	1 Lyc. @ 380 hp.	8′ 6″	2	.....	.....	Rigid, fixed-pitch rotor props.
Collins Radio Co. *Cedar Rapids, Ia.*	Aerodyne	Ducted fan	..	.....	42′	.....	.....	.....	.....	2 Con. @ 213 hp.	.....	.....	.....	.....	Duct inside diameter 7.5 ft.
Convertawings, Inc. *Amityville, N. Y.*	V-10 Quadrofoil	Tilt wing	5	Tandem[1]	23′ 3″	6′ 8″	160	2,719	4,552	1 GE T58 @ 1,000 shp.	96″	4	12,000[2]	312	Prototype building.
De Lackner Helicopters, Inc. *Mt. Vernon, N. Y.*	DH-4 Aerocycle	.....	1	15′	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Several on bailment to universities.
	DH-5 Aerocycle	.....	1	.....	.....	.....	.....	.....	.....	1 Kiek. Mercury @ 40 hp.	180	2	.....	.....	
Doak Aircraft Co., Inc. *Torrance, Calif.*	VZ-4DA	Tilt ducts	2	25′	32′	10′	.....	2,000	2,700	1 Lyc. T53 @ 840 shp.	.....	2	.....	.....	600 lb. useful load.
Fletch-Aire, Inc. *Newton, N. J.*	.....	Ducted fan	1	.....	.....	.....	58	.....	1,500	2 piston @ 115 hp.	.....	.....	.....	235	Duct rotates 90 deg.
	.....	Ducted fan	4	.....	.....	.....	.....	.....	6,000	2 Lyc. T53 @ 840 shp.	.....	.....	27,600	215	Projected weapons carrier.
Helio Aircraft Corp. *Norwood, Mass.*	L-28A	.....	5	39′	30′	8′ 10″	231	2,037	3,000	1 Lyc. GO480@295 hp.	96″	1	22,500	189	In production.
Hiller Aircraft Corp. *Palo Alto, Calif.*	X-18	Tilt wing	2	48′	63′	24′ 7″	.....	33,000	.....	2 All. YT40-A-14	192″	2	.....	250	Testbed for USAF.
Kaman Aircraft Corp. *Bloomfield, Conn.*	K-16B	Tiltwing, deflected slipstream, & propulsive rotor	..	38′	38′ 4″	17′ 2″	254.6	.....	.....	2 GE T58 @ 1,000 shp.	168″	2	.....	.....	Navy flight research a/c.
Lanier Aircraft Corp. *Marlton, N. J.*	Paraplane	Boundary layer	1	20′ 7″	21′	.....	111	780	1,280	1 Lyc. 0320 @ 150 hp.	.....	1	23,000	165	Prototype flying.
	Paraplane	Boundary layer	4	27′ 11″	22′ 11″	9′ 6″	.....	1,200	2,200	1 Lyc. 0360 @ 180 hp.	.....	1	21,500	171	Project.
McDonnell Aircraft Corp. *St. Louis, Mo.*	XV-1	Convertiplane; unloaded rotor	3	26′	30′	10′ 8″	.....	.....	.....	1 Con.@550 hp. + tip jets	.....	.....	.....	.....	Translated Apr. 1955.
Leonard Mueller *Eau Claire, Wisc.*	Travois X-2	Ducted fan	4	20′[1]	10′	5′ 10″	.....	853	1,860	1 Aircooled 6V6 @ 245 hp.	120″	2	.....	135	Design study.
Piasecki Aircraft Corp. *Philadelphia, Pa.*	VZ-8P	Ducted fan	1	.....	.....	.....	.....	2,000	2,500	1 Con. Artouste IIB 425 shp.	.....	.....	.....	.....	Tactical ground support.
	59H	.....	4	.....	.....	.....	.....	2,600	3,670	2 Con. Artouste IIB 425 shp.	.....	.....	.....	.....	
	HRP	.....	12	41′	83′ 8″	13′ 6″	.....	4,720	7,200	2 Con. Artouste IIB 425 shp.	14′	.....	16,000[2]	110	
Robertson Aircraft Corp. *Ft. Worth, Tex.*	.....	Vectored slipstream	4	.....	.....	.....	.....	.....	.....	2 Lyc. GSO 480 @ 340 hp.	.....	2	.....	.....	Range about 1,000 mi.
Ryan Aeronautical Co. *San Diego, Calif.*	X-13 Vertijet	Mod. tail Sitter	1	21′	24′	15′	.....	.....	.....	1 R-R Avon @ 10,000 lb. t.	N.A.	None	.....	.....	Operates from platform.
	VZ-3RY	Vectored slipstream	1	23′ 5″	27′ 8″	10′ 8″	.....	.....	2,600	1 Lyc. T53 @ 850 shp.	.....	2	.....	.....	
Sikorsky Aircraft Division United Aircraft Corp. *Stratford, Conn.*	S-57	Convertiplane	..	.....	.....	.....	.....	.....	.....	1 P&W JT-12 @ 5,000 lb. t.	.....	.....	.....	575	Single-blade, retracting rotor.
	.....	Unloaded rotor	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Projected; 300 naut. mi. range.
Spacetronics, Inc. *Washington, D. C.*	.....	Ground effect	1	.....	.....	.....	.....	.....	.....	1 piston @ 12 hp.	48″	1	4–5″	.....	Testbed built.
Vanguard Aircraft Air & Marine Corp. *Paoli, Pa.*	Model 2	Ducted fan	2	22′	24′ 6″	.....	.....	.....	.....	1 Lyc. O540 @ 265 hp.	.....	.....	.....	.....	Testbed. Wing-buried rotor-props. Now in test phase.
Vertol Aircraft Corp. *Morton, Pa.*	VZ-2	Tilt wing	2	24′ 11″	26′ 5″	10′	110	2,600	3,300	1 Lyc. T53 @ 825 shp.	114″	2	.....	.....	Numerous conversions made.

Military definition of VTOL aircraft is one which can clear a 50-ft. obstacle 50 ft. from start of takeoff; STOL aircraft is one which can clear a 50-ft. obstacle 500 ft. from start to takeoff. Many VTOL aircraft can also function as STOL types, carrying higher payloads in latter configuration. Army-Navy-Air Force VTOL and STOL projects embrace wide variety of propulsion and lift schemes. Most are test beds providing flight research data for future operational vehicles.

Abbreviations:
All. — Allison.
AS — Armstrong-Siddeley (now Bristol Siddeley).
Con. — Continental.
GE — General Electric.
Lyc. — Lycoming.
N.A. — Not applicable.
P&W — Pratt & Whitney Aircraft.
Kiek. — Kiekhaefer.
RR — Rolls-Royce.

[1] U. S. Army Flying Platforms; dimension given (span) is width of vehicle.
[2] Hovering ceiling in ground effect.

U.S. Civil and Military Rotary-Wing Aircraft

Manufacturer and Address	Model number	Designation	Basic Data: No. of crew	No. of passengers	Cargo capacity, lb.	Dimensions: Rotor diameter	Max. length, blades unfolded	Over-all height to top of rotor	Weights: Weight empty, lb.	Max. gross wt. lb.	Powerplant: No., make, model and max. rating	Performance: Max. speed, mph., at altitude, ft.	Hovering ceiling in ground effect, ft.	Normal still-air range, mi.	Remarks
Bell Helicopter Corp. *Ft. Worth, Texas*	47G-2	Trooper	1	2	886	35′ 1″	41′ 5″	9′ 5″	1,564	2,450	1 Lyc. VO435 @ 200 hp.	100 @ S.L.-1,400	10,850	238	Army H-13H.
	H-13H	Sioux	1	2	886	35′ 1″	41′ 5″	9′ 5″	1,564	2,450	1 Lyc. VO435 @ 200 hp.	100 @ S.L.-1,400	10,850	238	Army H-13H.
	HTL-7	.....	1	1	574	37′ 2″	43′ 4″	9′ 4″	1,916	2,565	1 Lyc. 0435-6 @ 240 hp.	103 @ N.R.	8,200	154	Instrument trainer.
	47H	Bellaires	...	.....	.....	.....	41′ 3″	9′ 4″	1,499	2,350	1 AM6V4-200-C32 @ 200 hp.	98 @ S.L.-1,400	4,300	211	Commercial only.
	47G-3	Trooper	1	2	1,110	37′ 2″	.....	.....	1,564	2,550	1 Frank 6VS-335 @ 225 hp.	.....	18	....	
	47J	Ranger	1	3	1,210	37′ 2″	43′ 4″	9′ 4″	1,640	2,565	1 Lyc. VO-435 @ 220 hp.	105 @ S.L.-7,000	7,400	222	Also 2,800 lb. gross.
	HU-1A	Iroquois	1	6–10	2,250	44′	53′	11′ 3″	3,850	7,200	1 Lyc. T53-L-1 @ 770 hp.	142 @ N.R.	14,400	186	Former H-40.
	XV-3	Conv'tiplane	1	3	1,200	23′	.....	.....	3,600	.....	1 P&W R985 @ 450 hp.	.....	.....	....	
	47J-2	Ranger	...	.....	.....	.....	.....	.....	.....	2,850	1 Lyc. VO-540 @ 305 hp.	.....	.....	....	
Bensen Aircraft Corp. *Raleigh, N. C.*	B-8	Gyroglider	1	1	300	20′	20′	6′ 4″	105	475	.....	90 @ S.L.	.....	....	
	B-8W	Hydroglider	1	1	.....	20′	20′	7′ 4″	130	500	.....	60	.....	....	
	B-8B	Gyroboat	1	2	.....	21′	21′	5′ 9″	135	650	.....	60	.....	....	
	B-9	Little Zipster	1	0	.....	22′	22′	11′ 6″	385	800	1 Keikhaefer Mk. 78 @ 70 hp.	65 @ S.L.	9,000	100	
Brantly Helicopter Corp. *Phil., Pa.*	B-2	YHO-3	1	1	50	23′ 11″	27′ 9″	6′ 11″	980	1,600	1 Lyc. VO360-A1A @ 180 hp.	100 @ S.L.	4,000	300	All-metal.
Cessna Aircraft Co. *Wichita, Kans.*	CH-1C	YH-41	1	1	400	35′	32′ 8″	8′ 5″	2,045	3,000	1 Con. FSO470 @ 260 hp.	124 @ S.L.	9,600	260	Modified YH-41
Doman Helicopters, Inc. *Danbury, Conn.*	D-10	.....	1	7	1,900	48′	58′ 9″	10′ 5″	3,445	5,550	1 Lyc. SO720	100 @ S.L.	4,400	310	
	LZ-5	YH-31	1	7	1,400	48′	58′ 9″	10′ 5″	3,387	5,200	1 Lyc. SO580-A1B @ 400 hp.	76 @ 1,000	4,000	350	
	D-12	.....	2	0	.....	26′ 6″	26′ 4″	7′ 9″	.....	1,450	1 All. 250-C1 @ 250 shp.	140 @ N.R.	23,000	300	Study.
Gyrodyne Co. of America *St. James, N. Y.*	GCA-41A	YRON-1	1	0	60	17′	17′	8′	430	725	1 Porsche YO-95-2 @ 62 hp.	68 @ S.L.	4,900	59	
	GCA-41B	YRON-1	1	0	60	17′	17′	8′	325	725	1 Solar T-62 @ 62 hp.	72 @ S.L.	NA	31	
	GCA-59	XRON-1	1	0	60	20′	20′	9′	536	910	1 Porsche YO-95-6 @ 72 hp.	77 @ S.L.	7,300	53	Liaison rotorcycle.
	DSN-1	.....	0	0	.....	.....	.....	.....	.....	.....	1 Porsche GP-702/2	.....	.....	....	Destroyer ASW drone.
Hiller Aircraft Corp. *Palo Alto, Calif.*		YROE-1	1	0	60	18′ 6″	18′ 6″	6′ 11″	300	556	1 Nelson H63B @ 45 hp.	70 @ S.L.	9,200	30	Liaison rotorcycle.
		H-23D	1	2	407	35′ 5″	40′ 6″	9′ 9″	1,816	2,850	1 Lyc. VO-435 @ 250 hp.	95 @ S.L.	5,200	200	1,000-hr. + transmission. Army.
	UH-12E	12E	1	2	578	35′ 5″	40′ 6″	9′ 9″	1,700	2,700	1 Lyc. VO-540 @ 305 hp.	96 @ S.L.	11,550	200	Commercial only.
Hughes Aircraft Div. *Culver City, Calif.*	269A	YHO-2	1	1	.....	25′	28′	8′	867	1,550	1 Lyc. 0360-C2B @ 180 hp.	95 @ S.L.	13,500	220	45 min. engine change.
Kaman Aircraft Corp. *Bloomfield, Conn.*	H-43A		2	3	2,000	47′	47′	11′ 10″	5,800	6,800	1 P&W R1340 @ 600 hp.	110 @ 4,000	14,000	220	Local base rescue.
	H 43B	Huskie	2	8	2,000	47′	47′	12′ 5″	5,900	7,100	1 Lyc. T53 @ 860 shp.	107 @ 6,800	20,000	250	World altitude record.
	HU2K-1	Seasprite	2	4	4,000	44′	52′ 2″	12′ 5″	5,052	9,152	1 GE T58-GE-6 @ 1,050 eshp.	.....	.....	....	Navy utility.
	HOK-1	.....	2	3	2,000	47′	47′	12′ 5″	.....	6,800	1 P&W R1340 @ 600 hp.	100 @ 4,000	12,000	220	HUK-1 is Navy version.
	HTK-1	.....	0	0	.....	41′	41′	12′ 3″	.....	.....	1 Lyc. 0435 @ 245 hp.	.....	.....	....	Robot development.
	K-17	.....	2	0	.....	37′	37′	8′ 6″	950	2,000	1 Turbomeca Turmo @ 400 eshp.	80 @ S.L.	.....	....	Propulsion research.
Kellett Aircraft Corp. *Willow Grove, Pa.*	KH-15	.....	1	0	.....	.....	.....	.....	.....	.....	2 RM1 rockets @ 16 lb. t.	.....	.....	....	Research vehicle.
	KD-1A	.....	1	1	.....	40′	30′	10′ 9″	1,500	2,200	1 Jacobs L-4MA @ 225 hp.	110 @ N.R.	14,000	190	Autogiro.
	KD-10	.....	1	1	.....	40′	33′	9′ 11″	1,755	2,830	1 Con. 10520 @ 260 hp.	150 @ N.R.	21,000	420	Autogiro.
McDonnell Aircraft Corp. *St. Louis, Mo.*	120	.....	1	1	.....	31′	31′	9′	2,669	6,000	3 AiResearch GTC-85-135 @ 85 hp.	120 @ S.L.	10,000	94	Flying crane.
Republic Aviation Corp. *Farmingdale, N. Y.*	Alouette	.....	1	4	1,080	33′ 6″	31′ 10″	9′	1,830	3,000	1 Turbomeca Artouste II B @ 400 shp.	105 @ 14,500	15,500	325	Sud Aviation license.
Sikorsky Aircraft *Stratford, Conn.*	S-55A	H-19B&D	1–2	10	2,100	53′	62′ 3″	13′ 4″	5,250	7,500	WR R-1300-3 @ 800 hp.	112 @ S.L.	5,800	360	
	S-55C	H-19A&C	1–2	10	1,700	53′	62′ 3″	13′ 4″	4,950	7,200	P&W R-1340-57 @ 600 hp.	101 @ S.L.	2,000	400	
	S-56	H-37A	2–3	23	6,000	72′	88′ 0″	17′ 1″	20,690	31,000	P&W R-2800-54 @ 2,100 hp.	130 @ S.L.	7,000	145	
	S-58	H-34A	1–2	18	4,000	56′	65′ 10″	14′ 4″	7,630	13,000	Wr R-1820-84 @ 1,525 hp.	123 @ S.L.	4,900	182	
	S-60	.....	2	.....	8,000	72′	87′ 11″	17′ 0″	19,613	31,200	P&W R-2800-54 @ 2,100 hp.	130 @ S.L.	6,800	265	
	S-61	HSS-2	4	.....	.....	62′	72′ 5″	15′ 4″	10,854	17,300	GE T-58-8 @ 1,250 hp.	.....	.....	....	
	S-61L	.....	2–3	28	6,500	62′	72′ 5″	.....	10,259	18,700	GE CT-58-110-1 @ 1,250 hp.	150 @ S.L.	5,300	285	
	S-62	.....	1–2	9	2,000	53′	62′ 3″	14′ 2″	4,600	4,600	GE CT-58-100-1 @ 1,050 hp.	124 @ S.L.	15,800	260	
Vertol Aircraft Corp. *Morton, Pa.*	107	YHC-1	2	22	.....	48′ 4″	81′ 8″	16′ 10″	9,100	15,500	2 Lyc. T53 @ 825 shp.	144 @ 400	.....	....	Prototype.
	107 II	.....	2	25	6,836	50′	83′ 4″	6′	.....	18,400	GE T58-8	.....	7,800	....	
	105	.....	2	20	.....	44′	.....	.....	8,750	14,700	2 Lyc. T53 @ 825 shp.	140 @ S.L.	.....	....	Turbine Testbed.
	44	.....	2	15–19	5,420	44′	.....	.....	8,980	14,300	1 Wr. R1820	110 @ N.R.	4,900	....	
	.....	H-21A	1–2	14	.....	44′	86′ 4″	16′	8,300	14,500	1 Wr. R1820-103 @ 1,150 hp.	140 @ S.L.	14,900	450	
	43	H-21B	1–2	20	.....	44′	86′ 4″	16′	8,600	15,000	1 Wr. R1820-103 @ 1,425 hp.	140 @ S.L.	6,000	400	
	43	H-21C	1–2	20	4,500	44′	86′ 4″	16′	8,600	15,000	1 Wr. R1820-103 @ 1,425 hp.	140 @ S.L.	6,100	400	
	.....	H-21D	2	20	.....	44′	.....	.....	8,611	14,700	2 GE T58 @ 1,024 shp.	140 @ S.L.	.....	....	Turbine testbed.
	.....	YHC-1B	2	27–33	6,000	.....	51′	18′ 6″	15,459	23,500	2 Lyc. YT 55-L-5 @ 1,940 shp.	170 @ S.L.	12,800	....	Chinook

All. — Allison.
AM — Aircooled Motors.
Con. — Continental.
GE — General Electric.
Lyc. — Lycoming.
N.R. — Not reported.
P&W — Pratt & Whitney Aircraft.
RMI — Reaction Motors.
Wr. — Wright.

USSR Military and Civil Aircraft

Mission	Designation	NATO Code name	No. of crew	Over-all span, ft.	Over-all length, ft.	Gross weight, lb.	No. designation and max. power each engine	Maximum speed, mph.	Service ceiling, ft.	No. and type weapons	Remarks
FIRST-LINE AIRCRAFT											
STRATEGIC BOMBERS	.....	.....	...	78	195	300,000	2 x tj @ 35,000 lb.t. 2 x nuclear @ 70,000 lb.t.	.....	.....	.....	Nuclear bomber prototype; credited to designer V. M. Myasishchev
	Type 37	Bison	...	170	140	250,000	4 x Lulko tj. @ 19,500 lb. t.	610	57,000	.....	Equipped for aerial refueling.
	Tu-20	Bear	...	180	150	330,000	4 x tp. @ 12,000 eshp.	550	50,000	.....	Range about 8,000 mi.
	Tu-16	Badger	...	100	105	150,000	2 x Lulko tj. @ 19,500 lb.t.	600	50,000	.....	Comparable to Boeing B-47
TACTICAL BOMBERS	Il-28	Beagle	3	68	62	.....	2 x RD-45 tj. @ 5,000 lb.t.	600	45,000	2 x 23-mm. 2 x 12.7-mm.	Satellite production and use.
	Il-30	Blowlamp	2	57	70	.....	2 x tj. @ 17,000 lb. t.	750	.....	.....	55-deg. wing sweepback.
	Tu-14	Bosun	3	70	65	50,000	2 x VK-1 tj. @ 5,000 lb.t.	500	.....	.....	Navy torpedo bomber.
	.....	Backfin	3	75	85	.....	2 x tj. @ 17,000 lb.t.	900	.....	.....	Experimental prototype flew summer 1957; 59-deg. wing sweepback.
FIGHTERS	MiG-21	Faceplate	1	33	50	.....	1 x axial tj. @ 22,000 lb.t.	1,200	60,000	.....	Operational.
	MiG-?	Fitter	1	.....	...	.....	1 x axial tj. @ 22,000 lb.t.	1,000	.....	.....	Competitor to MiG-21; not in production; used area rule.
	MiG-19	Farmer	1	.....	...	27,000	2 x axial tj. @ 8,000 lb.t.+aft.	900	55,000	2 x 23-mm.	Low-set slab tail; 3,000 in service.
	Su-15	Fishpot	1	25	50	.....	1 x axial tj. @ 22,000 lb. t.	1,200	60,000	.....	Delta; 54-in. tailpipe dia. all-weather; in production.
	Su-16	Fishbed	...	.....	...	.....	.....	.....	.....	.....	Competition to Su-15; not in production.
	Yak-25	Flashlight A	2	40	...	.....	2 x axial tj. @ 8,000 lb. t.	700	.....	2 x 37-mm.	Standard operational all-weather fighter.
	Yak-?	Flashlight B	2	40	55	30,000	2 x axial tj.	800	.....	.....	Light bomber.
	Yak-?	Flashlight C	2	40	55	30,000	2 x axial tj.	800	.....	.....	All-weather; in production.
	MiG-17	Fresco	1	33	37	15,000	1 x VK-2JA tj. @ 6,850 lb.t.	M>1	51,000	2 x 23-mm. 1 x 37-mm.	MiG-15 development. C & D models have aft. & radar fire control systems for limited all-weather capability.
	MiG-15	Fagot	1	33	36	11,268	1 x VK-2 tj. @ 5,950 lb.t.	683	51,000	2 x 23-mm. 1 x 37-mm.	Satellite production and use; minimum 15,000 built.
HELICOPTERS	Mil-1	Hare	4	48.5[1]	...	4,938	1 x ASh-26B @ 575 hp.	105	.....	.....	Range 400 mi.
	Mil-3	.....	4	47[1]	39	5,180	.....	124	.....	.....	Mi-1T development.
	Mil-4	Hound	2	60[1]	...	12,015	1 x ASh-82V @ 1,700 hp.	130	11,800	None	Aeroflot uses 10-place Mi-4P.
	Mil-6	Hook	...	.....	...	.....	2 x Sol. @ 5,000 lb.t.	.....	.....	.....	New FAI 100 km. speed record: 166.5 mph.; has carried 24,000 lb. payload to 7,500 ft. alt.
	Yak-24	Horse	4	60[1]	75	35,000	2 x ASh-82B @ 1,430 hp.	.....	.....	None	Yak-24K is plush seat civil executive transport for Aeroflot.
	Yak-24K	Flying-Bus	...	.....	69	28,665	2 x ASh-82B @ 1,600 hp.	.....	.....	.....	
	Ka-18	Hog	...	.....	...	.....	1 x 250 hp.	.....	.....	.....	Coaxial rotor, 4 passenger.
	Ka-10	Hat	1	.....	...	440	1 x 55 hp.	.....	8,000	.....	Coaxial rotor.
	Ka-15	Hen	...	.....	...	.....	1 x 225 hp.	93	19,000	.....	Coaxial rotor, 2 passenger.
TRANSPORTS	An-2	Colt	2	54	35	11,000	1 x ASh-621A (@) 1,000 hp.	137	27,890	None	Holds FAI altitude record.
	An-4	Camp	...	.....	...	77,160	2 x NK tp. @ 4,000 eshp.	.....	.....	Tail turret	Assault transport; Aeroflot freighter.
	An-10	Cat	3–5	.....	...	.....	4 x NK&AI tp, @ 4,000 eshp.	450	30,000	None	85 passengers; An-10A carries 100.
	An-16	.....	...	.....	...	.....	4 x NK&AI tp, @ 4,000 eshp.	.....	.....	None	130 passengers; like An-10.
	An-14	(Little Bee)	...	65	36	7,050	2 x AI-14R	143	.....	None	Antonov design; 6 passengers.
	Il-12	Coach	2–5	104	70	38,000	2 x ASh-82FNV @ 1,850hp.	252	.....	None	USSR, Polish, Czech airlines; 3,000 built.
	Il-14	Crate	2–5	104	70	36,400	2 x ASh-82T @ 1,900 hp.	200	1,990	None	Il-12 development/replacement; prod. 30/month.
	Il-14M	Crate	...	.....	...	.....	.....	.....	.....	None	24-passenger version.
	Il-18	Coot	3–5	.....	...	.....	4 x NK&AI tp. @ 4,000 eshp.	.....	30,000	None	70–100 passengers; 2,600-mi. range.
	Tu-70	Cart	4	141	119	.....	4 x ASh-82FNV @ 1,850 hp.	215	.....	None	Tu-4 development (Boeing B-29 copy).
	Tu-104	Camel	3	114	121	120,152	2 x M-209 tj. @ 14,880 lb.t.	560	39,000	None	ICAO range; 1,988 mi.
	Tu-104A	Camel A	3	.....	...	.....	.....	600	.....	None	70 passengers; Tu-104B carries 100.
	Tu-110	Cooker	3	122	125	142,152	4 x M-209 tj. @ 15,000 lb.t.	600	36,000	None	2,000-mi. nonstop full-load range; 50 passengers 1st class, 100 tourist.
	Tu-114	Cleat	4	.....	177	.....	4 x NK-12M tp. @ 12,000 eshp.	550	35,000	None	Moscow-N.Y. nonstop capability with 100 passengers.
	Tu-114D	.....	...	180.5	...	240,000	4 x NK-12M tp. @ 12,000 eshp.	.....	.....	.....	.....
	Tu-124	.....	...	.....	...	.....	.....	.....	.....	.....	New medium range transport.
	Li-2	Cab	2	95	64	.....	2 x M-62R @ 1,000 hp.	.....	.....	.....	USSR-built Douglas DC-3.
	Be-6	Madge	...	108	...	51,600	2 x ASh-73 @ 2,000 hp.	260	3,045	.....	Patrol flying boat similar to Martin P5M-1.
	Tu-104B	.....	...	144	124.4	.....	2 x AM-3	560	.....	.....	.....
SUPPORT AIRCRAFT											
BOMBERS	IL-10	Beast	2	45.5	40	.....	1 x AM-12 @ 2,000 hp.	300	.....	1 x 12.7-mm. 2 x 7.62-mm.	Satellite use.
	Il-26	Butcher	3	68	62	.....	2 x axial tj. @ 5,000 lb.t.	570	45,000	2 x 23-mm. 1 x 20-mm.	Production predecessor of Il-28.
	Tu-4	Bull	6–8	141	99	.....	4 x ASh-82FNV @ 1,850 hp.	225	.....	.....	Russian copy of Boeing B-29.
	Tu-?	Barge	...	185	145	210,000	4 x tp. @ 4,500 eshp.	380	.....	.....	Pre-production quantities; turboprop testbed for Bear.
	Tu-2	Bat	5	61.9	45.3	28,224	2 x ASh-82FNV @ 1,850 hp.	360	36,000	2 x 20-mm. 2 x 12.7-mm.	Polish and Red Chinese service.
TRAINERS	Yak-18A	.....	2	.....	...	.....	1 x radial piston	161	16,897	.....	Tricycle gear.
	Yak-18P	.....	1	.....	...	.....	1 x radial piston	174	21,982	.....	Tricycle gear.

Abbreviations
AM—A. A. Mikulin
An—O. K. Antonov
ASh—A. D. Shvetsov
Il—Sergei Ilyushin
AI—A. G. Ivchenko
Ka—Nicolai Kamov
La—Semyon Lavochkin
[1]Rotor diameter
M—Motor (old designation)
MiG—Artem Mikoyan & Mikhail Gurevich
Mil—Mikhail Mil
NK—N. D. Kusnetzov
Sol—Soloviev
Su—Pavel Sukhoi
tj—turbojet engine
tp—turboprop engine
Tu—Andrei Tupolev
VK—V. Klimov
Yak—Aleksandr Yakovlev
aft.—afterburner

Foreign Rotary-Wing Aircraft

Manufacturer and Address	Model designation	Name	Seats, incl. crew	Rotor diameter	Length, blades folded	Max. height	Weight empty, lb.	Normal gross weight, lb.	Number, make, model and max. rating, ea.	Fuel capacity, gal.	Maximum speed, mph	Initial rate of climb, fpm.	Hovering ceiling in ground effect, ft.	Service ceiling, ft.	Maximum still air range, mi.	Remarks
CZECHOSLOVAKIA																
Czechoslovak Aircraft Works *Prague*	HC-2	Heli-Baby	2	28′ 10″	34′ 4″	8′ 4″	838	1,280	1 Praga DH @ 83 hp.	8.8	81	705	3,940	9,940	93	In production in Otrokovice.
FRANCE																
Sud Aviation *Paris*	S.E. 3130	Alouette II	5	33′ 6″	31′ 6″	9″	1,874	3,300	1 Turbomeca Artouste II @ 400 eshp.	152	106	880	11,150	14,800	346	Republic licensee in U.S.
	S.O. 1221	Djinn	2	36′	17′ 5″	8′ 7″	790	1,676	1 Turbomeca Palouste @ 528 eshp.	.....	82	690	3,280	.....	310	Republic licensee in U.S.
	S.E. 3200	Frelon	20+	49′ 2″	48′ 10″	15′ 5″	9,920	16,530	3 Turbomeca Turmo III B @ 750–800	.....	.....	.....	.....	.....	...	Prototype. First flight 6/10/59.
	S.E. 3160	Alovette III	7	36′ 1″	33′ ½″	9′ 8″	2,300	4,190	1 Turbomeca Artouste III @ 870 shp.	157	124	.....	13,000	13,000	155	
Helicop-Air *Paris*	L 50	Girhel	2	32′	.....	.....	.....	.....	1 Con. C90 @ 90 hp.	.....	.....	.....	.....	.....	...	.....
	L 51	Girhel	2	.....	.....	.....	.....	.....	1 Lyc. O-320 @ 150 hp.	.....	.....	.....	.....	.....	...	.....
GREAT BRITAIN																
Bristol Aircraft, Ltd. *Filton*	171 Mk. 4	Sycamore	5	48′ 7″	46′ 2″	10′ 1″	4,130	5,400	1 Alvis Leonides 524/1 @ 525 hp.	107	115	750	7,200	.....	370	Military, civil models.
	192	.....	27	48′ 8″	89′ 9″	17′	10,553	18,000	2 Napier Gazelle 2 @ 1,650 shp.	670	138	1,175	11,050	13,250	483	Tandem rotors.
Fairey Aviation, Ltd. *Hayes, Middlesex*	.....	Rotodyne	56–70	104′	104′	27′ 3″	35,564	53,500	2 RR Tyne @ 5,000 shp.	1,250	201	2,000	.....	.....	735	Kaman is US licensee
	.....	Rotodyne	50	90′	90′	22′ 2″	.....	38,000	2 Napier Eland N. EL. 3 @ 2,800 shp.	1,250	185+	2,000	.....	.....	460	Prototype.
Westland Aircraft, Ltd. *Yeovil, Somerset*	Mk. 1	Whirlwind	12	53′	41′ 8½″	13′ 3″	5,286	7,500	1 P&W R-1340-40 @ 600 hp.	145	109	800	.....	7,000	300	Many civil and military versions.
	.....	Widgeon	5	49′ 2″	40′ 10″	13′ 3″	4,424	5,900	1 Alvis Leonides 521/2 @ 500 hp.	83.2	104	700	5,000	10,500	310	Version of Dragonfly (Sik. S-51).
	.....	Wessex	14	56′	65′ 9½″	15′ 10″	7,600	12,600	1 Nap. Gazelle NGa. 13 @ 1,430 shp.	300	144	1,750	7,000	14,000	390	Royal Navy ASW.
	Series 1	Westminster	4	72′	89′ 4″	19′ 6″	22,300	36,000	2 Nap. Eland E. 229A @ 3,150 shp.	500	.....	1,900	9,000	.....	207	Prototype.
(Ex-Saunders-Roe)	P. 531-1	WASP	6	32′ 3″	30′ 4″	10′ 4″	2,836	3,950	1 Blackburn Turmo 603 @ 425 shp.	160	110	1,250	5,000	.....	260	Main rotor 350 rpm.
	P. 531-2	WASP	6	32′ 3″	30′ 4″	10′ 4″	2,836	5,000	1 Blackburn A-129 @ 968 shp.	160	128	1,490	17,800	.....	252	Main rotor 400 rpm.
	P. 502	Skeeter Mk. 12	2	32′	28′ 5″	10′ 2″	1,656	2,250	1 DH Gipsy Major @ 215 hp.	23	104	1,100	4,900	12,200	206	Main rotor 340 rpm.
ITALY																
Giovanni Agusta *Gallarate*	102	.....	8–10	47′ 7″	41′ 9″	10′ 7″	4,075	6,215	1 P&W R-1340 @ 600hp.	.....	120	1,100	9,200	14,100	300	First flight 2/3/59.
	AZ101G	.....	27	65′	64′ 6″	16′ 4″	12,100	25,000	3 de Hav. Gnome H. 1000 @ 1,000 shp.	.....	143	1,280	20,600	.....	280	Data based on design estimates.
	103	.....	1	22′ 7″	18′ 7″	6′ 8″	570	970	1 Agusta MVG A 70 @ 80 hp.	.....	95	710	7,300	12,000	280	Also versions of Bell 47G & J.
Aer Lualdi *Rome*	L. 59	.....	4	34′ 9″	29′ 9½″	9′ 8″	1,477	2,557	1 Con. IO-470-D @ 260 hp.	40	100	820	9,500	19,300	...	Series production.
Fiat Aviation Division *Turin*	7002	.....	7	39′ 5″	.....	9′ 5″	1,320	3,085	1 Fiat 4700 gas generator @ 530 hp.	.....	106	.....	.....	11,150	185	Two-blade rotor.
NETHERLANDS																
Nederlandse Helicopter Industrie N.V. *Papendrecht*	H-3	Kolibrie	2	33′	33′	9′	600	1,540	2 NHI TJ-5A ramjets @ 62 hp.	106	70	440	1,360	11,000	45	Agriculture.
POLAND																
Aircraft Construction Center *Swidnik*	SM-2	.....	5	47′	55′ 7½″	10′ 10″	4,000	5,380	1 AI-26V @ 575 hp.	.....	99	886	6,562	13,120	217	Redesigned SM-1, Polish version of Mil Mi-1.
	BZ-4	Zuk	4	39′ 4½″	41′ 10″	8′ 6½″	2,315	3,300	1 Narkiewicz WN-4 @ 320 hp.	44	97	905	1,970	9,840	161	
WEST GERMANY																
Carl F. W. Borgward *Bremen*	.....	Kolibri I	3	30′ 10″	27′ 3″	10′	1,765	2,645	1 Lyc. VO-435-A1B @ 260 hp.	40	100	790	492	14,760	250	Production follows 2nd prototype.
Bolkow-Entwicklungen *Ottobrunn Bei Munchen*	.....	Bo-103	1	21′ 7″	.....	.....	.....	882	1 ILO @ 40–50 hp.	.....	87	.....	.....	.....	280	Trainer.

Leading Foreign Aircraft, Military and Civil

Manufacturer	Model designation	Aircraft name	Primary mission	Max. No. of crew	Max. No. of passengers	Overall wingspan, ft.	Overall length, ft.	Maximum height, ft.	Wing gross area, sq. ft.	Weight empty, lb.	Gross weight, lb.	Number, make, model and max. rating of powerplants	Maximum speed, mph.
ARGENTINA													
Fabrica Militar de Aviones (Instituto Aerotecnico) *Cordoba*	I.A. 35	Huanquero	Multi	3	8	64′ 3″	45′ 10″	15′ 5″	455	7,700	13,700	2 I.A. 19 R El Indio @620 hp.	225
	I.A. 37	.....	Research	1	0	32′ 9″	36′	11′ 9″	516	6,160	9,900	1 R-R Derwent 5 @ 3,600 lb. t.	500
	I.A. 38	.....	Cargo Transport	...	.....	105′	44′ 3″	15′	1,431	18,700	35,200	4 I.A. 16 El Gaucho @ 450 hp.	156.5
	I.A. 45	.....	Personal	1	3-4	44′ 6″	29′	9′ 2″	205	2,426	3,670	2 Lyc. 0-320 @ 150 hp.	178
	I.A. 46	.....	Utility	1	2	38′ 7″	24′ 11″	7′ 3″	194	1,213	2,204	1 Lyc. 0-320 @ 150 hp.	121
AUSTRALIA													
Commonwealth Aircraft Corp. Pty., Ltd. *Lorimer Street, Port Melbourne, Victoria*	C.A. 25	Winjeel	Trainer	3	0	38′ 9″	28′	9′	249	3,289	4,235	1 P&W R985-AN2 @ 450 hp.	187
	C.A. 27	Sabre Mk. 32	Fighter	1	0	37′ 1″	27′ 6″	14′ 8″	302	11,000	20,000	1 R-R Avon 26 @ 7,500 lb. t.	700
	C.A. 28	Ceres	Agricultural	1	0	47′	30′ 3″	9′	312	4,060	7,000	1 P&W Wasp 53HI-G @ 600 hp.	140
Government Aircraft Factories *Fishermen's Bend Melbourne, Victoria*	.....	Canberra 20	Bomber	2	0	64′	65′ 6″	15′ 6″	960	.....	51,000	2 R-R Avon Mk. 109	.....
	.....	Jindivik Mk. 2	Drone	0	0	19′	23′ 4″	.....	76	1,750	2,800	1 B-5 Viper ASV3	575
BELGIUM													
Avions Fairey S.A. *Gosselies*	.....	Tipsy Junior Mk. VI	Sport, Training	1	0	23′	18′ 9½″	4′ 6″	113	470	770	1 Con. @ 65 hp.	107
	T66 Mk. 2	Tipsy Nipper	Sport, Training	1	0	19′ 8″	15′	6′ 2″	87′ 6″	420	660	1 Flugzeubau Stark K.G. "Stamo" 1400A @ 45 hp.	75
BRAZIL													
Sociedade Construtora Aeronautica Neiva, Ltda *Rua N.S. de Fatima, 360, Botucatu, Sao Paulo*	IPD5082	.....	Reconnaissance	1	1	35′ 3″	23′	9′	180	1,100	2,460	1 Lyc. O-320 @ 150 bhp.	.....
	P-56-C	Paulistinha	Primary Trainer	1	1	35′ 3″	22′	8′ 2″	180	880	1,300	1 Con. C-90-8F @ 95 bhp.	138
CANADA													
Avro Aircraft Ltd. *Box 4004, Terminal "A" Toronto, Ontario*	CF-100 Mk. 5	.....	Interceptor	2	0	60′ 10″	54′ 2″	14′ 6″	591	.....	33,600	2 Orenda 11 @ 7,000 lb. t.	.....
Canadair Ltd. *P.O. Box 6087 Montreal, Quebec*	CL-13	Sabre 6	Fighter	1	0	37′ 1½″	37′ 6″	14′ 9″	288	10,840	15,100	1 Orenda 14 @ 7,200 lb. t.	700
	CL-28	CP-107 Argus	Anti-sub.	15	0	142′ 4″	128′ 3″	36′ 8″	2,075	81,000	148,000	4 Wright R-3350 @ 3,700 hp.	288
	CL-30	Silver Star	Trainer	2	0	42′ 5″	37′ 8″	11′ 8″	238	8,440	16,800	1 R-R Nene 10 @ 5,100 lb. t.	520
	CL-41	.....	Trainer	2	0	36′ 4″	32′ 0″	9′ 4½″	220	4,700	6,500	1 P&W JTC-12 @ 2,400 lb. t.	474
	CL-44-6	CC-106	Transport	5	134	142′ 4″	136′ 7″	36′ 8″	2,075	88,829	205,000	4 R-R Tyne 12 @ 5,730 ehp.	405
	CL-44D-4	Forty Four	Cargo	4	0	142′ 4″	136′ 7″	36′ 8″	2,075	87,575	205,000	4 R-R Tyne 12 @ 5,730 ehp.	405
	CL-44D-4	Forty Four	Transport	4	189	142′ 4″	136′ 7″	36′ 8″	2,075	95,930	205,000	4 R-R Tyne 12 @ 5,730 ehp.	335
	CL-66B	CC-109	Transport	3	40	105′ 4″	81′ 6″	28′ 1½″	920	35,187	57,500	2 Napier Eland 504A @ 3,500 ehp.	335
	CL-90	CF-104	Strike reconn.	1	0	21′ 11″	54′ 9″	13′ 6″	196	.....	.....	1 GE J79-GE-7 @ 15,000 lb. t.	M2+
	.....	.....								.....	.....		
The de Havilland Aircraft of Canada, Ltd. *Downsview P.O. Ontario*	DHC-2	Beaver	Transport	1-2	5-6	48′	30′ 4″	10′ 7″	250	2,951	5,100	1 P&W @ 450 hp.	163
	DHC-3	Otter	Transport	1-2	9-10	58′	42′	15′	375	4,368	8,000	1 P&W @ 600 hp.	153
	DHC-4	Caribou	Transport	2	27-30	95′	68′	36′	920	14,500	26,000	2 P&W @ 1,450 hp.	214
EAST GERMANY													
Vereinegung Volkseigener Betriese Flugzeugbau *Pirna, Elbe*	Baade B.B.152	.....	Transport	4-5	48-72	86′ 8″	102′ 8″	31′ 10″	1,485	63,000	102,515	4 Type 014 @ 6,945 lb. t.	572
	IL-14P	.....	Transport	3-4	26	104′	69′ 11″	25′ 11″	1,076	26,900	37,500	2 ASh-82T @ 1,900 hp.	267
FRANCE													
Societe Boisavia *11, Rue Pierre Brossolette, Ivry-Sur-Seine*	B. 605	Mercurey	Personal	1	3	37′ 6″	23′ 6″	7′ 6″	194	1,430	2,575	1 SNECMA 4LO2 @ 170 hp.	155
S.A. des Ateliers d'Aviation Louis Breguet *24, Rue Georges Bizet, Paris (XVIe)*	1050	Alizé	Carrier Based ASW	3	0	51′ 2″	45′ 5″	16′ 4″	377	12,560	18,100	1 R-R Dart 21 @ 1950 shp	265
	763	Deux-Ponts "Provence"	Civil Transport	3	107	140′ 8″	94′ 11″	31′ 4″	1,965	68,150	113,500	4 P&W R2800 CA 18 @ 2400 hp.	272
	765	Deux-Ponts "Sahara"	Mil. Transport	4	125	140′ 8″	94′ 11″	31′ 4″	1,965	68,343	119,000	4 P&W R2800 CB 16 @ 2400 hp.	265
	1150	Atlantic	ASW	12	.....	124′	90′	30′	1,292	.....	86,000	R-R Tyne	.....
	940	Integral	STOL Experiment	2	0	57′ 5″	39′ 4″	.....	470	.....	15,500	4 Turbomeca Turmo II @ 400 hp.	236
	941	.....	STOL Transport	2	0	76′	71′	29′	890	23,000	44,000	4 GE T.58 @ 1250 hp.	265
Generale Aeronautique Marcel Dassault *78, Quai Carnot, Saint Cloud, (Seine-et-Oise)*	SMB-2	Super-Mystere	Fighter-Bomber	1	0	34′ 4″	46′ 1″	16′ 11″	375	15,400	22,050	1 SNECMA Atar 101-G @ 9,900 lb. s. t.	M.1>
	.....	Etendard IV-M	Fighter (Naval)	1	0	31′ 6″	47′ 3″	14′	312	.....	19,400	1 SNECMA Atar-8 @ 9,700 lb. s. t.	M.1.06
	.....	Mirage III	Fighter	1	0	27′	45′ 5″	14′ 9″	366	12,350	18,740	1 SNECMA Atar-9+1 sepr. engine @ 13,225 lb	M.2>
	.....	Mirage III-B	Fighter-Trainer	2	0	.....	.....	.....	.....	.....	18,450	1 SNECMA Atar-9 no sepr. engine @ 13,225 lb	M.2>
	.....	Mirage IV	Bomber	2	0	.....	.....	.....	.....	.....	55,100	2 SNECMA Atar-9 @ 13,225 lb.	M.2>
	MD-415	Communaute	Transport	2	8	53′ 11″	42′ 8″	14′ 1″	387.5	7,960	13,000	2 Turbomeca Bastan @ 750 hp.	332

*—Cruise Speed

1—Approximately

LEADING FOREIGN AIRCRAFT, MILITARY AND CIVIL

Manufacturer	Model designation	Aircraft name	Primary mission	Max. No. of crew	Max. No. of passengers	Overall wingspan, ft.	Overall length, ft.	Maximum height, ft.	Wing gross area, sq. ft.	Weight empty, lb.	Gross weight, lb.	Number, make, model and max. rating of powerplants	Maximum speed, mph.
Hurel-Dubois *Route de Verrieres a Meudon, Villacoublay, (Seine-et-Oise)*	H.D. 321	.....	Transport	3	40	148′ 7½″	77′ 4″	28′ 7½″	1,076	24,498	41,200	2 Wright 982C9HE1 @ 1,525 hp.	206
	H.D. 34	.....	Photo	7	0	148′ 7½″	77′ 6″	28′ 7½″	1,076	26,300	42,600	2 Wright 982C9HE2 @ 1,475 hp.	206
Societe des Avions Max Holste *11 Rue Gosset, Reims*	MH-1521	Broussard	Utility aircraft	1	5–7	45′ 1″	28′ 3″	12′	273′ 4″	3,417	5,952	1 P&W R-985 @ 444 bhp.	165
	MH-260	Super Broussard	Light transport	1–2	20–23	71′ 11″	57′ 8″	21′ 7″	593′ 4″	11,168	21,583	2 "Bastan III" Turbomeca @ 986 eshp.	252
Morane-Saulnier *3 & 5 Rue Volta Puteaux (Seine)*	MS. 733	Aleyon	Trainer	3	0	37′	31′ 1″	11′ 4″	235	2,810	3,850	1 Potez 6 DO2A @ 240 hp.	164
	MS. 760	Paris	Business	1	3	33′ 3″	32′ 11″	8′ 7″	194	4,400	7,600	2 Turb. Marbore II @ 880 lb. t.	405
	MS. 1500	Epervier	Attack	2	0	42′	34′ 8″	10′ 9″	259	3,650	6,270	1 Turb. Bastan @ 870 eshp.	250
	MS. 880	Rallye	Personal	1	2	28′ 8″	20′ 5″	8′ 6″	112	950	1,570	1 Con. C14F @ 95 hp.	128
Nord Aviation, Societe Nationale de Constructions Aeronautiques *12 bis Avenue Bosquet, Paris (7)*	Nord 2502	Noratlas	Transport	3	40	110′ 3″	72′	.....	1,089	28,085	50,700	2 Bristol Hercules 758/759 @ 2040 bhp.+2 Turbomeca "Marbore II" @ 880 lb. t.	.....
	Nord 2508	Noratlas	Transport	3	40	110′ 3″	72′	.....	1,089	29,080	50,700	2 P&W R2800 @ 2500 bhp +2 Turbomeca "Marbore II" @ 880 lb. t.	270
	Nord 2501	Noratlas	Transport	3	42	107′	72′	10′ 1″	1,083	28,600	48,400	2 SNECMA Hercules @ 2,040 hp.	275
	Nord 3202	.....	Trainer	2	0	32′ 1½″	26′ 2½″	10′ 3″	177.5	1,813	2,495	1 Potez 4.D-32 @ 240 hp.	161
	Nord 1405	Gertaut II	Fighter	1	0	24′ 7″	32′ 6″	13′ 6″	282	8,058	10,252	1 SNECMA Atar 101G @ 9,700 lb. t.	M1.3
	Nord 1500	Griffon II	Interceptor	1	0	26′ 7″	47′ 8½″	16′ 5″	344.5	.....	14,550	1 SNECMA Atar 101E3+ 1 Nord ramjet	930
	Nord 3400	.....	Liaison	1	1	41′ 8″	27′ 8″	10′ 2″	209.9	2,028	2,976	1 Potez 4.D-30 @ 240 hp.	124*
Potez Air-Fouga *90 Rue Miromesnil, Paris (8)*	C.M. 170	Magister	Trainer	2	.....	37′	33′	9′	186	4,268	6,978	2 Potez Air Fouga Type C.M. 170 @ 880 lb. t.	435
	C.M. 175	Zephyr	Carrier, Trainer	2	.....	37′	33′ 7″	9′	186	4,706	7,417	2 Potez Air Fouga Type C.M. 175 @ 880 lb. t.	403
	Potez 75	.....	Attack	2	0	43′	30′	8′ 10″	.....	3,891	5,578	1 Potez 8. D-32 @ 520 hp.	171
	P. 840	.....	Transport	...	16–24	63′	50′	.....	.....	8,910	16,720	4 Turbomeca Astazou	300
SNECMA *150 Boulevard Haussman Paris (13)*	C. 450	Coléoptère	VTOL	1	0	.....	23′ 3″	.....	.....	.....	6,600	1 SNECMA Atar 101 E.S.V. @ 7,700 lb. t.	500
Sud Aviation *37, Boulevard de Montmorency, Paris (XVIe)*	S.E. 210	Caravelle	Transport	3–4	80	112′ 6″	104′ 10″	28′ 6″	1,579	57,970	99,210	2 R-R Avon Mk. 527 @ 11,700 lb. t.	510
	S.E.117	Voltigeur	Tac. Support	3	0	58′ 11″	40′ 3″	18′ 7″	448	9,260	14,374	2 Turb. Bastan @ 750 shp.	245
	S.E.118	Diplomate	Business	2	6–20	58′ 11″	44′ 3½″	20′ 2″	450.5	9,923	15,347	2 Turb. Bastan @ 750 shp.	320
GREAT BRITAIN **Sir W. G. Armstrong Whitworth Aircraft, Ltd.** *Baginton, Nr Coventry, Warwickshire*	AW 650	Argosy	Freightercoach	2–3	80	115′	86′ 9″	27′	1,458	45,350	82,000	4 R-R Dart @ 2,100 eshp.	296
	AW 660	Argosy	Transport	4	77	115′	86′ 9″	27′	1,458	50,000	90,000	4 R-R Dart @ 2,410 eshp.	296
	AW 670	Air Ferry	Pass./Cargo	2–3	126	115′	86′ 9″	27′	1,458	47,000	82,000	4 R-R Dart @ 2,100 eshp.	265
	AW 671	Air bus	Pass. Freight Trans.	2–3	96	115′	86′ 9″	27′	.....	46,000	82,000	4 R-R Dart Mk. 526 @ 1,910 hp.	599
	F.(G.A.) Mk.6	Sea Hawk	Fighter Bomber	1	0	39′	39′ 8″	8′ 8″	278	13,200	16,200	1 R-R Nene 103	524
Auster Aircraft, Ltd. *Rearsby, Leicester*	Mk. 9	.....	Liaison	3	0	36′ 5″	23′ 8″	8′ 11″	197.6	1,590	2,125	1 Bl. Bombardier@180 hp.	127
	B. 8	Agricola	Agricultural	1	2	42′	28′ 1″	8′ 4″	254.7	.....	3,810	1 Con. 0-470-M @ 240 hp.	127
	J/1U	Workmaster	Agricultural	1	1	36′	23′ 7″	6′ 2″	185	.....	2,550	1 Lyc. 0-360-A @ 180 hp.	104
	.....	Atlantic	Business	1	3	.....	.....	.....	.....	.....	.....	1 Con. [illegible] 8510 @ 205 hp.	135
	J1N	Alpha	Utility	1	2	.....	.....	.....	.....	.....	.....	1 DH Gipsy Major 1 @ 130 hp.	108*
	J5F	Aiglet	Trainer	2	1	32′	23′ 2½″	8′ 3″	164	1,323	2,200	1 DH Gipsy Major 1 @ 130 hp.	127
	J5B	Autocar	Personal	1	3	36′	23′ 2″	7′ 6″	185	1,413	2,400	1 DH Gipsy Major 1 @ 130 hp.	116
	.....	Alpine	Personal	1	2	36′	23′ 2″	7′ 6″	185	.....	.....	1 DH Gipsy Major 10 @ 145 hp.	124
Blackburn and General Aircraft Ltd. *Brough, Yorkshire*	C. Mk. 1	Beverley	Transport	4	97	162′	99′ 5″	38′ 5″	2,916	82,100	145,000	4 Bristol Centaurus @ 2,850	238
	N.A. 39	.....	Strike	2	.....	42′ 6″	62′ 4″	16′ 0″	.....	.....	.....	2 DeHavilland Gyron Junior	.....
Bristol Aircraft, Ltd. *Filton House, Bristo*	175	Britannia 100	Transport	9	92	142′ 4″	114′	37′ 6″	2,075	88,000	155,000	4 B-S Proteus 705 @ 3,900 eshp.	370
	175	Britannia 300	Transport	9	132	142′ 4″	124′ 3″	37′ 6″	2,075	92,850	160,000	4 B-S Proteus 755 @ 4,120 esph.	400
	175	Britannia 310	Transport	9	132	142′ 4″	124′ 3″	37′ 6″	2,075	93,400	185,000	4 B-S Proteus 765 @ 4,445 eshp.	410
	175	Britannia 250	Pass./Cargo	9	84	142′ 4″	124′ 3″	37′ 6″	2,075	95,900	185,000	4 B-S Proteus 765 @ 4,445 eshp.	410
	175	Britannia 320	Transport	9	139	142′ 4″	124′ 3″	37′ 6″	2,075	94,500	185,000	4 B-S Proteus 765 @ 4,445 eshp.	410
The de Havilland Aircraft Co., Ltd. *Hatfied Aerodrome, Herts*	D.H. 110	Sea Vixen	AW Fighter	2	0	50′	53′ 6½″	11′	.....	.....	.....	2 R-R Avon	M>1
	D.H. 104	Dove	Transport	2	8–11	57′	39′ 4″	13′ 4″	335	5,678	8,800	2 DH Gipsy Queen 70 Mk. 2 @ 380 hp.	200
	D.H. 114	Heron	Transport	2	14–17	71′ 6″	48′ 6″	15′ 7″	499	8,484	13,500	4 DH Gipsy Queen 30 Mk. 2 @ 250 hp.	191
	D.H. 106	Comet 4	Transport	5	60–81	115′	111′ 6″	29′ 6″	2,121	73,600	162,000	4 R-R Avon@10,500 lb. t.	515*
	D.H. 106	Comet 4B	Transport	4	72–102	108′	118′	29′ 6″	2,059	75,100	158,000	4 R-R Avon 29 @ 10,500 lb. t.	530*
	D.H. 106	Comet 4C	Transport	4	72–102	115′	118′	29′ 6″	2,121	75,600	162,000	4 R-R Avon 29 @ 10,500 lb. t.	506*
	D.H. 121	.....	Transport	3	70–100	89′ 10″	114′ 9″	27′	1,358	62,300	105,000	3 R-R RB163 @ 10,000 lb. t.	600+*
	D.H. 112	Sea Venom Mk. 22	AW Fighter	2	0	42′ 10″	36′ 8″	8′ 6″	.....	.....	15,800	.....	575
The English Electric Co., Ltd., *Marconi House, Strand, London, W.C. 2.*	P. 1B	Lightning F-1	AW Fighter	1	0	34′ 10″	50′	19′ 5″	.....	.....	.....	2 R-R Avon w/reheat	M>2
	P. 11	Lightning T. 4	Trainer	2	0	34′ 10″	50′	19′ 5″	.....	.....	.....	2 R-R Avon w/reheat	M>2
	B. 6	Canberra	Bomber	2	0	64′	65′ 6″	15′ 7″	960	.....	.....	2 R-R Avon	.....
	P. R. 7	Canberra	Photo Recon.	2	0	64′	66′ 8″	15′ 7″	960	.....	24,060	2 R-R Avon	M .68
	B(I)8	Canberra	Bomber	2	0	64′	65′ 6″	15′ 7″	960	.....	.....	2 R-R Avon	.....
	P.R. 9	Canberra	Photo Recon.	2	0	68′	66′ 8″	15′ 7″	960	.....	.....	2 R-R Avon	.....
	TSR II	.....	Strike	...	.....	.....	.....	.....	.....	.....	.....	B-S Olympus	.....

Manufacturer	Model designation	Aircraft name	Primary mission	Max. No. of crew	Max. No. of passengers	Overall wingspan, ft.	Overall length, ft.	Maximum height, ft.	Wing gross area, sq. ft.	Weight empty, lb.	Gross weight, lb.	Number, make, model and max. rating of powerplants	Maximum speed, mph.
Fairey Aviation, Ltd. *Hayes, Middlesex*	.....	Gannet A.E.W. Mk. 3	Early Warning	3	0	54′ 7″	44′	16′ 9″	.....	.....	.....	1 B-S Double Mamba @ 3,875 eshp.	.....
	.....	Gannet A.S. Mk. 4	Anti-Sub.	3	0	54′ 3″	43′	13′	482.8	15,069	21,600	1 B-S Double Mamba @ 3,035 eshp.	310
	.....	Gannet T. Mk. 5	Trainer	3	0	54′ 3″	43′	13′	.....	.....	.....	1 B-S Double Mamba @ 3,035 eshp.	.....
	.....	Delta 2	Research	1	0	26′ 9″	51′ 8″	11′	360	.....	.....	1 R-R Avon	M>1
Folland Aircraft, Ltd. *Hamble, Southampton, Hampshire*	FO. 141	Gnat Mk. 1	Fighter	1	.....	22′ 2″	29′ 8″	8′ 10″	137	4,200	6,750	1 B-S Orpheus 701 @ 4,520 lb. t.	M .98
	FO. 144	Gnat Trainer	Trainer	2	.....	24′	30′ 9″	9′ 7½″	175	5,070	7,435	1 B-S Orpheus @ 4,230 lb. t.	M>.95
Gloster Aircraft Co., Ltd. *Gloucester*	T. 3	Javelin	Trainer	2	0	52′	60′	16′	930	.....	.....	2 B.S. Sapphire 6 @ 8,300 lb. s. t.	.....
	F(AW)7	Javelin	A.W. Fighter	2	0	52′	56′ 4″	16′	930	.....	.....	2 B.S. Sapphire 7R @ 11,000 lb. s. t.	.....
	F(AW)8	Javelin	A.W. Fighter	2	0	52′	56′ 4″	.....	930	.....	.....	2 B-S Sapphire 7R @ 11,000 lb. s. t.	.....
	F(AW)9	Javelin	A.W. Fighter	2	0	52′	56′ 4″	.....	930	.....	.....	2 B.S. Sapphire 7R @ 11,000 lb. s. t.	.....
Handley Page, Ltd. *Claremont Road, Cricklewood, London, N.W. 2*	H.P. 80	Victor B. Mk. 1	Bomber	5	0	110′	114′ 11″	28′ 1½″	.....	.....	.....	4 B-S Sapphire @ 11,000 lb. t.	.....
	H.P. 80	Victor B. Mk. 2	Bomber	5	0	120′	114′ 11″	28′ 1½″	.....	.....	.....	4 R-R Conway @ 17,250 lb. t.	.....
	H.P.R. 7	Dart Herald	Transport	2	47	94′ 9½″	71′ 11″	23′ 4″	886	22,808	39,000	2 R-R Dart @ 2,100 eshp.	295
	H.P. 113	.....	Transport	2	8–12	71′ 3″	71′ 6″	17′	775	.....	36,500	2 B-S Orpheus @ 5,250 lb. t.	530*
Hawker Aircraft, Ltd. *Richmond Road Kingston-on-Thames, Surrey*	P. 1121	.....	Strike	1	0	.....	.....	.....	.....	.....	.....	1 DH Gyron	M>1
	P 1067	Hunter F. 4	Fighter	1	0	33′ 8″	45′ 10½″	13′ 2″	340	.....	.....	1 R-R Avon RA21@8,000 lb. t.	.....
	P1067	Hunter F. 6	Fighter	1	0	33′ 8″	45′ 10½″	13′ 2″	340	.....	.....	1 R-R Avon RA28 @ 10,000 lb. t.	.....
	P1101	Hunter T. 7	Trainer	2	0	33′ 8″	48′ 10½″	13′ 2″	340	.....	.....	1 R-R Avon RA21 or RA28	.....
	.....	Hunter T. Mk. 66	Trainer	2	0	33′ 7″	49′	13′ 2″	349	.....	.....	1 R-R Avon Mk. 203 RA28	.....
Hunting Aircraft, Ltd. *Luton Airport, Luton, Bedfordshire*	.....	President	Transport	2	12	64′ 6″	46′	16″	400	9,020	13,500	2 Al. Leonides @ 550 hp.	223
	P. 66	Pembroke	Multi	2	10	64′ 6″	46′	16′	400	9,178	13,500	2 Al. Leonides @ 550 hp.	223
	P. 56	Provost T. Mk. 1	Trainer	2	0	35′ 2″	28′ 9″	12′ 2″	214	3,350	4,400	1 Al. Leonides @ 550 hp.	201
	P. 84	Jet Provost T. Mk. 3	Trainer	2	0	35′ 10″	32′ 4″	10′ 2″	214	.....	6,400	1 B-S Viper @ 1,750 lb. t.	329
Lancashire Aircraft Co., Ltd *Samlesbury Airfield, Blackburn, Lancashire*	.EP. 9	Prospector	Multi	1–2	2–4	43′ 6″	30′	10′	227.6	2,010	3,700	1 Lyc. GO-480-G1A6 @ 295 hp.	146
F. G. Miles, Ltd. *Shoreham Airport, Sussex*	M. 100	Student	Trainer	1	1	29′ 2″	31′ 6″	6′ 3″	144	2,400	3,900	1 Turb. Marbore II @ 883 lb. t.	298
	M. 100/2	Centurion II	Personal	1	3–4	32′ 6″	31′ 9″	7′ 4″	182	3,882	7,000	1 B-S Viper @ 2,640 lb. t. or 2 Con. J69T25 @ 1050 eshp.	419
A. V. Roe & Co., Ltd. *Greengate, Middleton, Manchester*	698	Avro Vulcan B. Mk. 2	Bomber	5	0	111′	97′ 1″	27′ 2″	.....	.....	.....	4 B-S Olympus 201 @ 17,000 lb. t.	.....
	696	Avro Shackleton Mk. 3	Anti-Sub.	10	0	119′ 10″	87′ 4″	23′ 4″	1,421	.....	100,000	4 R-R Griffon 57A @ 2,455 hp.	300
	748 Series 1	.. ..	Transport	3	40–44	95′	67′	24′ 10″	795	18,794	33,000	2 R-R Dart R. Da 6 Mk. 514 @ 1,740 eshp.	294
	748 Series 2	.....	Transport	3	40–44	95′	67′	24′ 10″	795	19,694	36,000	2 R-R Dart R. Da 7 Mk. 531 @ 2,105 eshp.	316
Scottish Aviation, Ltd. *Prestwick Airport Ayrshire*	CC. Mk. 1	Prestwick Pioneer	Transport	1	4	49′ 4″	34′ 4″	10′ 4″	390	4,200	5,800	1 Al. Leonides 530/7 @ 540 bhp.	145
	CC. Mk. 1	Twin Pioneer	Transport	2	16	76′ 6″	45′ 3″	12′ 3″	670	10,478	14,600	2 Al. Leonides 531/8 @ 605 bhp.	173
Short Brothers & Harland, Ltd. *P. O. Box 241 Queens Island, Belfast*	S.C. 5	Britannic	Strategic Freighter	4	255	158′ 9½″	136′ 5″	47′	2,446	107,185	218,000	4 R-R Tyne R. Ty 12 @ 5,730 eshp.	391
	S.C. 7	.....	Light Freighter	1–2	15	64′ 1″	38′ 11″	13′ 11″	373	4,914	9,000	2 Cont. GTS 10-520 @ 390 thp.	200
	S.B. 5	.....	Research	1	0	30′ 6″	45′ 9″	16′ 7″	.....	.....	.....	Bristol Orpheus	.....
	S.C. 1	.....	VTOL	1	0	23′ 6″	24′ 4″	10′ 7″	.....	.....	.....	5 R-R RB108	.....
Vickers-Armstrongs (Aircraft), Ltd. *Weybridge, Surrey*	700	Viscount	Transport	2–3	40–63	93′ 8″	81′ 10″	26′ 9″	963	36,000	62,000	4 R-R Dart R. Da. 3 Mk. 506 @ 1540 tehp.	328
	700D	Viscount	Transport	2–3	40–63	93′ 8″	81′ 10″	26′ 9″	963	37,070	64,500	4 R-R Dart R. Da. 6 Mk. 501 @ 1740 tehp.	345
	800	Viscount	Transport	2–3	52–73	93′ 8″	85′ 8″	26′ 9″	963	39,900	64,500	4 R-R Dart R. Da. 6 Mk. 510 @ 1740 tehp.	340
	810	Viscount	Transport	2–3	52–73	93′ 8″	85′ 8″	26′ 9″	963	41,565	72,500	4 R-R Dart R. Da. 7/1 Mk. 525 @ 1990 tehp.	370
	950	Vanguard	Transport	2–3	76–139	118′	122′ 10″	34′ 11″	1,529	80,314	141,000	4 R-R Tyne R. Ty. 11 Mk. 512 @ 5525 tehp.	445
	1100	V.C. 10	Transport	3–5	150″	140′	158′ 10″	39′ 1″	2,800	134,200	299,000	4 R-R Conway R. Co. 42 Mk. 540 @ 20,250 lb. t.	620
	.....	Scimitar F. Mk. 1	Fighter	1	0	37′ 2″	55′ 4″	15′	.....	.....	.....	2 R-R Avon 200 series @ 11,250 lb.t.	.....
	674	Valiant B. Mk. 1	Bomber	5	0	114′ 4″	108′ 3″	34′ 2″	2,362	.....	.....	4 R-R Avon RA. 28 Mk. 204 @ 10,000 lb. t.	.....
	.....	Swift F.R. Mk. 5	Fighter/Recon.	1	0	32′ 4″	41′ 5½″	13′ 6″	306	.....	21,400	1 R-R Avon RA. 7R Mk. 114 @ 9,450 lb. t.	685
	TSR. 2	.....	Strike/Recon.	...	.....	.....	.....	.....	.....	.....	.....	B-S Olympus	.....
ITALY													
Industrie Meccaniche Aeronautiche Meridionali-AERFER *30, Corso Malta, Naples*	.....	A.S. Sagittario II	Fighter	1	0	24′ 7″	31′ 2″	6′ 7″	158	4,960	7,160	1 R-R Derwent 9 @ 3,600 lb. t.	620
	.....	Ariete	Fighter	1	0	24′ 7″	31′ 6″	.....	.....	5,291	.....	1 R-R Derwent+1 R-R Soar	M =1.1
Construzioni Aeronautiche Giovanni Agusta *Cascina Costa, Gallarate*	AZ-8L	.....	Transport	2	22	83′ 8″	63′ 9″	21′ 8″	719	.....	23,810	4 Al. Leonides Mk. 22 (503/2) @ 470 hp.	252
	AZ-8S	.....	Transport	2	22	83′ 8″	63′ 9″	21′ 8″	719	.....	23,810	4 SNECMA 12S @ 575 hp.	.....

LEADING FOREIGN AIRCRAFT, MILITARY AND CIVIL

Manufacturer	Model designation	Aircraft name	Primary mission	Max. No. of crew	Max. No. of passengers	Overall wingspan, ft.	Overall length, ft.	Maximum height, ft.	Wing gross area, sq. ft.	Weight empty, lb.	Gross weight, lb.	Number, make, model and max. rating of powerplants	Maximum speed, mph.
Fiat-Divisions Aviazione *Corso G. Agnelli, 200, Turin*	G. 91	.....	Fighter	1	0	28′ 1″	34′ 2½″	13′ 1″	176.7	.....	11,350	1 B-S Orpheus B. Or. 80,302 @ 4,850 lb. t.	M>1
	G. 91T	.....	Trainer	2	0	28′ 2″	39′ 3″	13′ 9″	176.7	7,100	11,775	1 B-S Orpheus B. Or. 80,302 @ 5,000 lb. t.	640
	G. 91R	.....	Photo Recon.	1	0	28′ 1″	34′ 2½″	13′ 1″	176.7	.....	.....	1 B-S Orpheus B. Or. 80,302 @ 5,000 lb. t.	M>1
	F. 86K	.....	Fighter	1	0	37′ 2″	40′ 1″	15′	288	.....	18,000	1 GE J47-GE-17B @ 7,350 lb. t.	650
Aeronautica Macchi *Corso Vittorio Emanuele 31, Milan*	MB. 326	.....	Trainer	2	0	32′ 11″	34′ 6″	11′ 4″	204.5	4,299	6,283	1 B-S Viper ASV8 @ 1,750 lb. t.	450
METEOR-Costruzioni Aeronautiche *Trieste*	FL 54BM	Meteor Tris	Personal	1	2	31′ 4″	22′	6′ 1″	155	959	1,543	1 Meteor G90 CA @ 90 hp	120
	FL 55DM	Meteor Super	Personal	1	3	31′ 4″	22′ 4″	6′ 1″	155	1,146	1,984	1 Meteor G180 CA @ 180 hp.	140
Nardi S.A. per Construzioni Aeronautiche *Aeroporto Forlanini, Milan*	FN-333	Riviera	Personal	1	3	34′	24′	10′	161.5	2,028	2,976	1 Con. O-470-H @ 240 hp.	180
Partenavia Construzioni Aeronautiche *Aeroporto, Forlanini, Milan*	P-57-2	Fachiro II	Personal	2	2	30′	22′	8′	144.2	1,367	2,315	1 Lyc. O-360-A2A @ 180 hp.	149
	P-59	Fachiro II	Personal & Trainer	2	2	30′	21′ 7″	7′	154.0	1,060	1,570	1 Con. C90-12F @ 95 hp.	128
Piaggio & C., Societa per Azioni *Via Antonio Cecchi 6, Genoa (434)*	P. 136-L1	.....	Personal	1	4	44′ 5″	35′ 5″	12′ 7″	270	4,420	6,000	2 Lyc. GO-480-B1A6 @ 270 hp.	184
	P. 136-L2	.....	Personal	1	4	44′ 5″	35′ 5″	12′ 7″	270	4,680	6,615	2 Lyc. GSO-480-B1C6 @ 340 hp.	213
	P. 149-D	.....	Personal	1	4	36′ 6″	28′ 11″	9′ 6″	203	2,557	3,704	1 Lyc. GO-480-B1A6 @ 270 hp.	192
	P. 166	.....	Personal	1	7	46′ 9″	38′ 1″	16′ 3″	286	5,070	8,115	2 Lyc. GSO-480-B1C6 @ 340 hp.	226
	P. 155-CT	.....	Amphibian	4	30	102′ 6″	98′ 5″	31′ 10″	1,078	32,000	53,000	2 Allison 501-D13 @ 3,750 eshp.	350
Progetti Costruzioni Aeronautiche *Strada A.N. Pavese 78, Milan (Procaer)*	.....	Cobra 400	Touring	1	1	28′ 6″	25′ 7″	9′ 2″	131.5	1,760	3,085	1 Turbomeca Marbore II @ 880 lb. t.	380
	.....	Picchio F. 15	Personal	1	2–3	30′ 7″	24′	9′ 2½″	116.4	1,345	2,205	1 Lyc. O-320-B @ 160 hp.	186
Aviamilano Costruzioni Aeronautiche *Via Macedonio Melloni 70 Milan*	F. 14	Nibbio	Executive	2	2	31′ 3″	23′ 7″	8′ 1″	128	1,500	2,550	1 Lyc. O-360 A1A @ 180 hp.	205
	P. 19	Scricciolo	Club Trainer	2	.....	33′ 6″	23′	6′ 7″	150	880	1,540	1 Agusta M.V.G.A. 7010 85 hp.	130
	F. 8	Falco	.....	2	.....	26′ 3″	21′ 5″	8′	107.6	1,132	1,715	1 Lyc. O-320 A1A @ 150 hp.	208
JAPAN **Nihon Aeroplane Mfg. Co., Ltd.** *Shiba Tamuracho, Minato-Ku, Tokyo*	YS-11	.....	Pass. Trans.	3	52–60	105′	87′ 3″	30′ 7″	1,020	29,720	50,250	2 R-R Dart R.Da.-10/1x2 @ 2,600 eshp.	.....
Fuji Heavy Industries, Ltd. *Marunouchi Chiyoda-Ku, Tokyo*	T1A	T1F2	Trainer	2	.....	36′ 7″	39′ 7″	13′ 3″	239	6,065	10,700	1 Orpheus Mk. 316 @ 4,000 lb. t.	.....
	T-34A	B-45 Mentor	Trainer	2	.....	32′ 9″	25′ 9″	9′ 5″	178	2,246	2,980	1 Continental O-470-13 @ 225 hp.	.....
	KM	Super-Nikko	Liaison	1	4	32′ 8″	26′ 0″	9′ 5″	177.6	2,400	3,850	1 Lycoming GSO-480-B1A6 @ 340 hp.	225
	LM	Nikko	Liaison	1	4	32′ 8″	26′ 0″	9′ 5″	177.6	2,104	3,527	1 Continental O-470-13A @ 225 hp.	185
	L-19E	Bird Dog	Liaison	1	1	35′ 9″	24′ 9″	7′ 5″	174	1,658	2,340	1 Continental O-470-11 @ 213 hp.	.....
Mitsubishi Heavy Industries Reorganized, Ltd. Aircraft Dept. *Chiyoda-Ku, Tokyo*	F-86F	Sabre	Fighter-Bomber	1	.....	39′ 1″	37′ 6″	14′ 7″	313′ 3″	11,019	20,245	1 GE J47-GE-27 @ 6,090 lb. t.	669
	F104J	Star Fighter	Fighter	1	.....	.....	.....	.....	.....	.....	.....	1 GE 779-GE-7	.....
	S-55A	.....	Utility	1–2	10	.....	42′ 3″	13′ 4″	.....	4,880	7,200	1 P&W Wasp S1H2 (R-1340-57) @ 600	110
	S-55C	.....	Utility	1–2	10	.....	42′ 3″	13′ 4″	.....	5,180	7,900	1 Wright Cyclon 990 C7BA1 (R1300-3) @ 700	101
NETHERLANDS **Royal Netherlands Aircraft Factories (Fokker)** *Schiphol-Zuid, Amsterdam*	F-27	Friendship	Transport	2	32–40	95′ 2″	77′ 2″	27′ 6″	754	21,830	37,500	2 R-R Dart RDa. 6 Mk. 511 @ 1,720 eshp. or 2 R-R Dart RDa. 7 Mk. 528 @ 2,105 eshp.	.....
	F-27	Friendship De-Luxe	Transport	2	16	95′ 2″	77′ 2″	27′ 6″	754	23,600	37,500	2 R-R Dart RDa. 6 Mk. 511 @ 1,720 eshp. or 2 R-R Dart RDa. 7 Mk. 528 @ 2,105 eshp.	
	F-27	Freightship	Pass./Cargo	2	32–40	95′ 2″	77′ 2″	27′ 6″	754	21,300	37,500	2 R-R Dart RDa. 6 Mk. 511 @ 1,720 eshp. or 2 R-R Dart RDa. 7 Mk. 528 @ 2,105 eshp.	.....
	F-27M	Troopship	Military Transport	2	45	95′ 2″	75′ 9″	27′ 6″	754	21,820	42,000	2 R-R Dart RDa. 6 Mk. 511 @ 1,720 eshp. or 2 Dart 7 Mk. 528 @ 2,105 shp.	.....

Manufacturer	Model designation	Aircraft name	Primary mission	Max. No. of crew	Max. No. of passengers	Overall wingspan, ft.	Overall length, ft.	Maximum height, ft.	Wing gross area, sq. ft.	Weight empty, lb.	Gross weight, lb.	Number, make, model and max. rating of powerplants	Maximum speed, mph.
SPAIN													
Construcciones Aeronauticas, S.A. *Calle del Rey Francisco, 4 Madrid (8)*	C-201	Alcotan	Transport	3	10	60′ 4″	45′ 3″	13′ 0″	450	8,600	12,125	2 Enmasa Sirio 7E-C20 @ 550 hp.	211
	C-202	Halcon	Transport	3	14	70′ 8″	52′ 5″	19′ 9″	618	11,570	18,080	2 Enmasa Beta B-41 @ 775 hp.	230
	C-202B	Halcon	Business	2	6	67′ 5″	53′ 6″	20′ 9″	603	13,385	21,270	2 Wright Cyclone R/1820/56 @ 1300 hp.	268
	C-207	Azor	Transport	4	30–40	91′ 2″	68′ 4″	25′ 4″	924	21,660	34,500	2 Bristol Hercules 730 @ 2,040 hp.	285
	C-1131	Bucker	Trainer	2	.....	24′ 2″	22′ 1″	7′ 4″	145	1,000	1,580	1 Enmasa Tigre G-N-A @ 125 hp.	122
	C-127	Dornier	Liaison	1	4	39′ 5″	31′ 5″	11′ 5″	210	2,300	3,500	1 Lycoming GO-480-B1A6 @ 274 hp.	155
Aeronautica Industrial, S.A. *Plaza de las Cortes, 2 Madrid 14*	AISA I-115	.....	Primary Trainer	2	.....	31′ 3″	24′ 1″	6′ 10″	150.6	1,346	1,980	1 Enmasa Tigre G-IV-B @ 150 bhp.	.....
	AISA I-11B	.....	Touring or Training	1	1	30′ 7″	21′ 3″	6′ 3″	144	926	1,474	1 Continental C-90 12F @ 95 bhp.	.....
	AISA AVD-12C	.....	Liaison or Touring	1	3	36′ 5″	25′ 5″	6′ 10″	193	1,664	2,866	1 Continental O-470-A @ 225 bhp.	.....
	AISA AVD-12	.....	Liaison or Ambulance	1	2–3	36′ 5″	25′ 5″	6′ 10″	193	1,576	2,425	1 Enmasa Tigre G-IV-B @ 150 bhp.	.....
La Hispano-Aviacion, S.A. *Calle San Jacinto 102–106 Sevilla*	HA-100-F1	Triana	Adv. Trainer	2	.....	34′ 1″	29′ 5″	9′ 9½″	186.6	4,340	6,440	1 Wright Cyclone 957C7BA1 @ 800 hp.	279
	HA-100-E1	Triana	Adv. Trainer	2	.....	34′ 1″	29′ 5″	9′ 9½″	186.6	4,360	6,460	1 Enma Beta B-4 @ 755 hp.	275
	HA-200-R1	Saeta	Adv. Trainer	2	.....	34′ 2″	29′ 1″	10′ 8″	187.2	3,695	6,995	2 Turboneca Marbore 11A @ 880 lb. t.	435
SWEDEN													
Svenska Aeroplan Aktiebolaget *Linkoping*	Saab-J29F	.....	Fighter	1	0	36′ 1″	33′ 2″	12′ 3″	258	9,480	13,360	1 Sven. RM-2 @ 6,175 lb. t.	660
	Saab 32A	Lansen	AW Attack	2	0	42′ 8″	48′ 1″	15′ 8″	.....	15,500	22,000	1 Sven. RM-5 @ 9,500 lb. t.	700
	Saab-J32B	Lansen	AW Interceptor	2	0	42′ 8″	48′	15′ 6″	.....	.....	.....	1 Sven. RM-6 @ 15,000 lb. t.	700+
	Saab-32C	Lansen	Photo-Recon.	2	0	42′ 8″	48′ 1″	15′ 8″	.....	15,500	22,000	1 Sven. RM-5 @ 9,500 lb. t.	700
	Saab-35	Draken	AW Fighter	1	0	30′ 10″	53′	.....	.....	.....	16–18,000	1 Sven. RM-6 @ 15,000 lb. t.	M.1.8
	Saab-J35B	Draken	AW Interceptor	1	0	30′ 10″	53′ 4″	.....	.....	.....	16–18,000	1 RR RB.146 @ 13,200 lb. t.	M>2
	Saab-90A-2	Scandia	Transport	3	40	91′ 11″	69′ 11″	23′ 3″	922	21,960	35,270	2 P&W R2180-E1 @ 1,800 hp.	277
	Saab-91B	Safir	Trainer	3	0	34′ 9″	26′	7′ 2″	146	1,580	2,315	1 Lyc. O435-A @ 190 hp.	170
	Saab-91C	Safir	Personal	1	3	34′ 9″	26′	7′ 2″	146	1,625	2,685	1 Lyc. O435-A @ 190 hp.	169
	Saab-91D	Safir	Trainer	3–4	0	34′ 9″	26′	7′ 2″	146	1,570	2,660	1 Lyc. O366 @ 180 hp.	169
	Saab-J35C	Draken	Dual contr. Trainer	2	....	30′ 10″	53′	.....	.....	.....	16–18,000	1 Sven. RM-6 @ 15,000 lb. t.	.....
SWITZERLAND													
Pilatus Flugzeugwreke A.G. *Stans, Nr. Lucerne*	P-3	.....	Trainer	2	0	34′ 1″	28′ 8″	10′	177	2,447	3,120	1 Lyc. GO-435-C2A @ 260 hp.	192
	PC-6	Porter	Multi	1	5–7	49′ 10″	34′ 5″	10′	.....	2,400	3,960	1 Lyc. GSO-480-A7-A6 @ 340 hp.	.....
WEST GERMANY													
Aero-Jodel *Aero Flugzeugbau Hubert Zuerl, Munich-Heimstetten*	D-11A	Aero-Jodel Club	Personal	1	1	27′	21′ 4″	6′ 9½″	.....	838	1,433	1 Cont. A-65/8 @ 65 hp.	.....
	D-11C	Aero-Jodel Club	Personal	1	1	27′	21′ 4″	6′ 9½″	.....	838	1,433	1 Cont. C-90/12F@ 95hp.	.....
Dornier-Werke GmbH. *Friedrickshafen a B.*	Do. 27 Q-3	.....	Multi	2	2–4	39′ 4″	32′ 1″	8′ 6″	209	2,220	3,740	1 Con. O-470-K @ 230hp.	.....
	Do. 27 Q4	.....	Multi	2	2–4	39′ 4″	31′ 5″	8′ 9″	209	2,310	4,080	1 Lyc. GO-480-B1A6 @ 270 hp.	.....
	Do. 28	.....	Multi	2	2–4	45′ 2″	29′ 7″	10′ 4″	241	3,538	5,137	2 Lyc. O-540-A1A @ 2250 hp.	.....
Scheibe-Flugzeugbau G.m.b.H. *Dachau*	SF-23A	Sperling	Utility	1	1	32′ 4½″	20′ 4″	7′ 2″	130.7	992	1,544	1 Con. C90-12F @ 95 bhp.	124.5
	SF-23B	Sperling	Utility	1	1	32′ 4½″	20′ 4″	7′ 2″	130.7	992	1,544	1 Con. O200-A @ 100 bhp.	127.5
	SF-23C	Sperling	Utility	1	1	32′ 4½″	20′ 4″	7′ 2″	130.7	1,036	1,610	1 Lyc. O-235-C1 @ 115bhp.	134

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